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Samir Alhafith

Senior Support
Engineer (ACSR)

Samir has been a Senior Support Engineer within TSG at Amber Technology for the past twelve years. Samir is responsible for managing and escalating customer issues, fault repairs and ensuring an ongoing dialogue with vendors is always maintained. He project manages and documents all customer issues, engages and deploys resources (internal and external) as required, to achieve the best possible outcomes.

Avid Certified Support Representative – editing, storage, asset management.



Steven Fox

Senior Support
Engineer (ACSR)

Steven has been working in the broadcast industry for the past twelve years and joined Amber in 2017. Steven has an extensive background in the live and post production environments including data wrangling, network infrastructure and video and audio systems within both linear and IP domains. He has worked on the design, deployment and support of high-pressure and fast turnaround productions such as “I’m a Celebrity”, “Love Island” and the Rio Paralympics.

Avid Certified Support Representative – editing, storage, asset management.



Daniel Maher

Support
Engineer (ACSR)

Daniel has been employed at Amber Technology for the past eight years. After gaining experience in our audio Service team, Daniel transitioned into a support role primarily engaged with Avid Pro Tools, handling client’s systems at many Australian Broadcasters and Post-Production facilities. He has a background within the IT, broadcast and music industries and is an active member of the ASSG.

Avid Certified Support Representative – ProTools, Media Composer and ISIS.

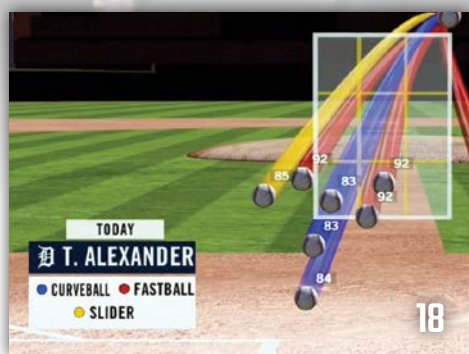
Avid Certified Instructor – ProTools



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Going the (Social) Distance

By Phil Sandberg

AS YOU MAY OR MAY NOT be aware (because it's been a hell of a year), the U.S. National Association of Broadcasters recently announced that its 2021 NAB Show, previously scheduled for April 11–14 in Las Vegas, is now scheduled for October 9–13, 2021, making it yet another event on the industry calendar trying to stay ahead of the COVID-19 curve and hoping that large-scale tradeshows can make a return in the not too distant future.

According to the NAB, the organisation extensively surveyed its "show community" to collect feedback on its digital initiatives, ascertain how the COVID-19 pandemic is impacting on exhibitor and delegate attendance plans, and canvas alternative dates for the event.

Of course, its "show community" doesn't seem to have included the NAB's transatlantic colleagues over at IBC HQ, whose Amsterdam-based show is usually held in September. It also creates logistical issues for the NAB's own New York event. Then there are the other industry events, given the state of the COVID-19 pandemic globally, who will be looking, if they are not already, to push their schedules out from what was always an optimistic/naïve first half of 2021. The GSMA recently announced a rescheduling of its Mobile World Conference Shanghai for 2021 which will now take place from 23 – 25 February 2021, and MWC21 Barcelona will now take place between 28 June – 1 July 2021.

Of course, there will be another round of virtual trade shows amongst this traffic jam, and these will likely bump into each other again as event organisers wait, again, until the last moment to pull the pin on their physical events.

Hastily cobbled together in the initial period of the pandemic, virtual trade show platforms

are growing in sophistication – and usefulness. While NAB Express and the IBC Showcase were pretty basic – and came with a questionable ROI for exhibitors (especially for those who could reproduce the experience in-house), the ConnectAsia/BroadcastAsia platform, which will be online throughout the year, displays a user-experience more akin to the physical tradeshow experience. Same for the IP Oktoberfest from the Alliance for IP Media Solutions (AIMS) which opted to leverage existing online videoconferencing technologies. These types of platforms do serve as a viable alternative to physical events and should remain as part of the mix in the longer term in a, hopefully, post-COVID world.

I understand the optimism of the trade show organisers, but I don't share it. The large, international shows are going to be diminished for some time, especially without a widely available vaccine. More likely is a revival of smaller, local events in those territories where the virus is under some sort of control. Bubbles will "pop up" where neighbouring territories have the confidence in their health regimes – e.g., Singapore and Malaysia, Australia and New Zealand – and even between bubbles. For the foreseeable future, the global events won't be returning to their glory days. But, hey, I'm happy to be proved wrong.

THE REAL ISSUE THAT EVERYONE IS MISSING

Of course, in all the hand-wringing over tradeshow cancellations and rescheduling, one point has been largely overlooked – it is the financial health of the end users of technology we should be worried about. They are the people and companies who ultimately finance tradeshows, exhibitors and even this publication. We should be helping them to adapt to this new environment with

solutions, advice and support (and that also means supporting, not undermining, existing customer relationships with distributors. Like the tradeshows, the future of customer relationship is local).

BROADBAND BROADSIDE

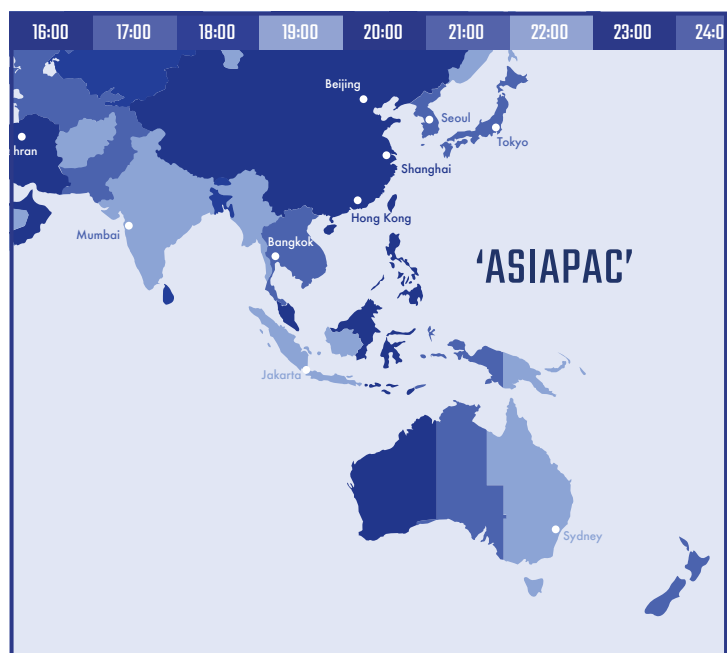
There's nothing like doing something right the first time and Australia's National Broadband Network is nothing like doing something right the first time. With the announcement of a \$4.5 billion network investment plan to give up to 75 per cent of fixed line premises across regional and metropolitan Australia access to ultra-fast broadband (1 Gigabit per second) by 2023, the Liberal National Party Government has all but admitted its scuppering of Labor's fibre-to-the-premise version of the NBN was short-sighted to say the least. To be financed through borrowing from private debt markets, the upgrade will create an estimated to create 25,000 new jobs across the country over the next two years, including the direct creation of 16,600 jobs in industries such as construction, engineering, project management, transport and retail trade among others. Imagine how many new jobs and enterprises, since 2013, could have been powered by a properly rolled-out and future-proofed NBN. Imagine a world where national infrastructure projects aren't politicised or done to benefit interest groups. Imagine ...

Thanks for reading

Phil Sandberg – Editor/Publisher

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New Australian Content Measures Cause Division

THE AUSTRALIAN FEDERAL GOVERNMENT

has announced a restructure of local content regulations and is injecting AUD\$53 million into the development and production of local film and television as part of the 2020-21 Federal Budget. "The Government is providing \$30 million in funding to Screen Australia over two years to support the production of Australian drama, documentary and children's film and television content," announced Minister for Communications, Cyber Safety and the Arts, the Hon Paul Fletcher MP. "Screen Australia will also receive an additional \$3 million over three years to establish a competitive grants program to cultivate quality Australian screenwriting and script development.

"We are also providing \$20 million to the Australian Children's Television Foundation over two years to boost the development, production and distribution of high-quality Australian children's content."

"As part of these changes, the Producer Offset – a key screen funding mechanism through which producers receive a refund of part of the production budget through the tax system – will be set at a harmonised 30 per cent for all domestic film and television production.

The Federal Producer Offset for film production is currently 40%.

"The old approach of treating film and television differently no longer makes sense. Increasing the offset to 30 per cent for television will mean additional funding for Australian television production – and in turn support higher production values and programs with a better prospect of being sold into the global content market, taking advantage of the opportunity created by the explosion of streaming video services like Netflix, Disney+, Stan and Amazon Prime."

These measures will be complemented by changes to streamline and simplify the drama, documentaries and children's content 'sub-quota' Australian content rules for broadcasters. The sub-quotas were temporarily suspended as an emergency measure during COVID-19, but will be reintroduced from 1 January 2021.

Content will count towards the new, simplified requirement if it is either drama, or children's content, or documentary content. With the exception of a cap on the number of hours of documentary content that can be counted towards meeting the requirement, the particular mix chosen will be a matter for each broadcaster based on its business strategy and judgement of audience appeal.

Commercial broadcasters will continue to be required to provide 55 per cent overall Australian content on their primary channels between 6:00 am and midnight, and to provide 1460 hours of Australian content per year on their multi-channels.

The points scheme underpinning the sub-quotas will give more points to higher-budget productions, creating a stronger incentive to

commission bigger budget drama. The Government will also legislate to reduce the existing Australian content spend obligation on selected subscription television channels from ten per cent to five per cent.

In response to the Australian Competition and Consumer Commission's 2019 Digital Platforms Inquiry, the Government says it is implementing a staged process to reform media regulation towards an end state of a platform-neutral regulatory framework covering both online and offline delivery of media content to Australian consumers.

It says work will continue under that process, including examining whether to introduce an Australian content spend obligation on streaming video on demand services above a minimum size threshold in the Australian market. As an initial measure, the largest streaming video services will be asked to commence reporting to the Australian Communications and Media Authority on Australian content acquisition from the 2021 calendar year.

Industry body Free TV Australia welcomed the Government's announcement.

Free TV CEO Bridget Fair said the announcement is a "... huge positive for the Australian film and television production sector. The Government has combined a more flexible quota system with strong incentives for production of quality Australian programs in a way that should stimulate a broad range of Australian stories.

"The old quota system was collapsing under its own weight. There has long been a need for the onerous and outdated framework, in place since the 1980's, to be updated. The Government has carefully considered this issue and the Minister's decision has simplified and modernised the quota framework while supporting Australian production with strong incentives and direct funding."

However, not all stakeholders are pleased with the announcement. Industry body Screen Producers Australia claims the various measures could reduce the amount of Australian content being produced by at least fifty per cent and remove thousands of jobs from the sector as well as opportunities for audiences across the world to engage with Australian stories.

"With the local screen industry already reeling from the impacts of COVID-19 and the freezing of contracting caused by the suspension of

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quotas since April, the announcement is an unfortunate backward step and we predict will result in the demise of many Australian businesses and livelihoods," said SPA CEO Matthew Deane. "Deregulation of legacy platforms without a transition plan into regulation of new platforms creates a disjointed and incomplete policy response that tinkers around the edges, appears to have been driven by old-world thinking and has scant regard to the future of Australian screen content. A once in a generation chance to reset the foundations for Australian stories for future generations and bring regulation into the 21st century has been presented to the Government in a unified way by the screen industry and the response presented today falls short and needs rethinking.

"The effective abolition of children's content quotas, the watering down of drama and documentary requirements and the halving of requirements for subscription TV doesn't meet the Government's articulated desire for forward-thinking policy-making. Instead, it presents as the adoption of the deregulation wish-list of legacy broadcasters and their owners and the international streaming companies."

While SPA says it welcomes additional funding for Screen Australia and the Australian Children's Television Foundation, it is concerned as to the effectiveness of this as a measure to meet the needs of Australia's child audiences as it doesn't in its own right trigger production and could amount simply to development of projects with no pathway to audiences.

SPA says also the voluntary reporting requirement for streaming services represents the greatest lost opportunity, and leaves these businesses free to reap rich benefits from the Australian market with no requirement to contribute back to Australian businesses, employment or culture. It will also see Australian audiences miss out on access to Australian content on the platforms which they are now using.

"As soon as the policy spotlight is off streaming services, there will be no incentive for them to commission in this market. Given the regulation outlined in other territories including across Europe and North America, Australia urgently needs a timeframe for transitioning streaming platforms into a regulated environment and without this, in the long run, we will become a backwater for investment," Deane said. "We are also extremely concerned by the reduction in Producer Offset for feature film from 40% to 30%. The 40% offset for film had proven to be extremely successful and an integral part of financing for local features. We are not aware of any calls from any quarters for this vital financing lifeline to be reduced and the cut could mean the end of the line for so many great Australian feature films."

More information on the Government's package can be found at <https://bit.ly/33wCjas>



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MediaWorks NZ to Sell TV Operations to Discovery

NEW ZEALAND'S LARGEST independent commercial broadcaster MediaWorks and the global producer of real-life entertainment Discovery Inc have announced they have reached a binding agreement regarding the sale of MediaWorks' free-to-air TV business. The transaction is subject to a number of pre-completion approvals and is expected to complete by the end of the year.

The MediaWorks TV acquisition will be Discovery's most significant free-to-air investment in the New Zealand market to date, and includes entertainment channels Three and Bravo, streaming service ThreeNow, and multi-platform news and current affairs service Newshub, as well as the further channels Three+1, Bravo+1, The Edge TV and The Breeze TV. Discovery will continue the existing strong partnership with NBCUniversal for the Bravo channel joint venture.

In the New Zealand market, Discovery currently operates a portfolio of six pay-tv channels including Discovery Channel, TLC, Animal Planet, Food Network, Living and Discovery Turbo and two free-to-air channels HGTV and Choice TV.

While MediaWorks and Discovery work towards completion of the transaction, Glen Kyne has been appointed General Manager of TV, a role that will continue under Discovery post completion. Discovery's Australia and New Zealand operations will move under Simon Robinson, President APAC, and, following completion of the sale, Glen will report to Simon. Gareth Codd has been appointed Acting Commercial Director for MediaWorks Group in the interim. Rebecca Kent, GM of Discovery Australia, New Zealand and Pacific Islands, will continue to oversee the New Zealand pay-TV portfolio and free-to-air channels Choice and HGTV, and the Australia operations.

Following successful completion of the transaction, MediaWorks Group will continue to focus on the growth and success of its radio and out-of-home media businesses to ensure both divisions maintain their market leading position with over 2.4 million weekly listeners and 1700 advertising panels.

Visit www.mediaworks.co.nz and www.discovery.com

PEOPLE ON THE MOVE

THE ABC HAS APPOINTED NICK HAYDEN as Head of Entertainment. Since joining the ABC in 2016, Nick has created the COVID-19 friendly comedy At Home Alone Together, Whovians, Tonightly and the Australia Talks live show. He also developed and produced the Spicks and Specks Reunion Specials, The House with Annabel Crabb and Why Are You Like This – part of the ABC's Fresh Blood initiative to support emerging comedic talent. He has been ABC Entertainment Manager since 2019.

THE ABC HAS APPOINTED JENNIFER COLLINS as inaugural Head of Factual & Culture within its Entertainment & Specialist (E&S) division, to lead the development and production of content across genres such as arts, religion, science, education, health, history and social affairs.

Jennifer returns to the ABC from her most recent role as Director of Content at Fremantle

Australia, where she had responsibility for the development and production of scripted and non-scripted content. From 2013-2018, she worked as Head of Non-Fiction at Screentime, where she led the content and digital strategy across the non-scripted slate. Her previous ABC roles include Head of Development, Head of Factual and Head of Entertainment.

DEB HATTINGH has started a new position as Colourist and Online Editor at Warner Bros. International Television Production Australia. She was previously Senior Colourist with Artisan Post Group.

ANTHOS SIMON is now Senior Consultant at Muse Academy. He previously held the role of General Manager-Entertainment Technology with Event Hospitality & Entertainment Limited.

IAN STOKES has assumed the role of Director of Engineering at Gravity Media in Sydney. He previously held the position of Broadcast Engineer with Gravity's former incarnation Gearhouse Broadcast.

RICHARD KAUB has started a new position as Chief Technical Officer at AVW Group with a brief to lead AVW Group's engineering and establish a business presence in Perth, Western Australia. His previous roles include Network Engineer with Swift Media, and Technical Specialist, Broadcast Platforms, with Optus.

KARL SCHODT has been named Operations Manager at Pacific Cooperation Broadcasting Limited in Auckland, New Zealand.

SCOTT FAVELLE has been appointed Technology Director with Seven West Media. He joins SWM from SBS Australia where he was Manager, Enterprise Architecture.

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Michael Blackburn Joins tm stagetec systems

TM STAGETEC SYSTEMS has added Michael Blackburn to its rapidly expanding team of professionals in the role of Professional Audio and Broadcast Sales.

According to Mark Lownds, General Manager at tm stagetec systems, "We are excited for Michael to join our Sales team. Michael comes to us with an enormous amount of technical experience and has worked for many years in roles that are on the other side of the sales process. He understands clients' business needs and how to provide the type of sales service that builds long term relationships. Michael is an asset to our team. He is ready to help support our current and future clients."

On his new role, Michael added, "Having had extensive hands-on experience in the maintenance, design, project management,



acoustic design, technology architecture, procurement and operation of broadcast and audio studios facilities, I am able to apply practical experience to supporting our clients' needs. I am excited to be working with tm stagetec systems representing some of the most advanced audio solutions available today."

Not only does Michael work in the Pro-Audio sector for his 9-5 job at tm stagetec systems, his passion for all things audio extends to him also being owner, musician and engineer of two music recording studios.

Visit <http://www.tm-systems.com.au>

Andy Liell Joins Pacific Live Media as BDM

ANDY LIELL, ONE OF THE Australian broadcast, production and post-production industry's best-known and most experienced professionals, has joined Pacific Live Media as Business Development Director.

Liell has previously held senior positions at Sony Australia, Videocraft and Gravity Media and has a wealth of experience across the broadcast, production and post production sectors particularly in the areas of business management, technology sales and rentals, workflow design and project management.

Pacific Live Media MD Chris Dredge said, "We are thrilled to welcome someone of Andy's calibre to Pacific Live Media as he is a great fit for our company and the solutions we offer. We have seen such strong growth in streaming, IP-based live video and system integration solutions as we focus on problem solving and first-class customer support. Andy's has extensive

experience in all of these areas and has a strong track record of growing and marketing sales and rentals-based businesses. This makes him a formidable addition to our team and he will enable us to grow our business in new and exciting directions."

Andy Liell said, "Pacific Live Media are one of the most innovative and fastest growing companies in the market today. Chris is the best in the business at what he does and his knowledge in the rapidly evolving areas of live streaming, remote production and video over IP is second only to his impeccable customer support credentials. This is a great opportunity for me and I'm delighted to be a part of Pacific Live Media's continued success."

Contact Andy Liell to discuss Pacific Live Media solutions on 0439 135 604 or at andy.liell@pacificlivemedia.com

Ai-Media Lists on ASX After Successful AUD\$65.5m IPO

ACCESS INNOVATION HOLDINGS Limited (Ai-Media), the Australian-headquartered provider of technology-driven live and recorded captioning, transcription and translation services, has announced that trading of its shares on the Australian Securities Exchange (ASX) have commenced with the code AIM, following a successful initial public offering (IPO). Founded in Australia in 2003, Ai-Media has become a global leader in the provision of high-quality live and recorded captioning, transcription and translation services. Its technology platform combines artificial intelligence and human expertise to deliver speech-to-text accuracy. The company is the biggest captioning provider in the Australian market, with clients including major free-to-air and pay television networks, and has a growing international footprint, with offices in Australia, the US, UK, Canada and Singapore. Globally, it provides captioning for nearly 1 million minutes of live and recorded media content, and online events and web streams every month.

The IPO raised gross proceeds of AUD\$65.5 million at a price of \$1.23 per share (Offer Price). Funds raised via the IPO will be used to continue the Company's current growth trajectory, particularly in offshore regions and on the ongoing developments of its technology platform to provide a wider range of services for its customers.

The IPO attracted strong demand from domestic and international institutions, retail investors, along with the ongoing support of existing Ai-Media shareholders and employees to establish a high-quality shareholder base. On listing, Ai-Media will have approximately 144.4m shares on issue implying a market capitalisation of \$177.4 million at the Offer Price.

Bell Potter Securities Limited and Morgans Corporate Limited acted as Joint Lead Managers and Underwriters to the IPO. Jones Day acted as Australian legal adviser.

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SCA Announces New Content Leadership Structure

SCA CHIEF CONTENT OFFICER, Dave Cameron, has announced a “new and refreshed” Content Leadership structure that he says will provide maximum support with accompanying leadership across the national Hit and Triple M networks.

The new Content leadership team will drive the Hit and Triple M Metro and regional stations, with the regional radio stations to now become SCA’s ‘Community’ division.

“This new structure will provide a strong level of expertise and experience to lead, for both on and off-air content roles. It will also streamline our operations across the Metro and Community divisions delivering greater clarity, effectiveness and simplicity,” Cameron said.

“I believe that our radio networks comprising 99 stations in total have the best Content talent in the market and this new structure marks an exciting new chapter in SCA content across our Metro and Community divisions.”

Gemma Fordham and Mike Fitzpatrick will continue in their current Head of Network roles overseeing Hit

and Triple M respectively, now with a strong focus on the Sydney, Melbourne, Brisbane, Adelaide, Perth, Newcastle and Gold Coast markets.

Adrian Brine, who is currently SCA’s Head of Talent Development, has been promoted to Assistant Head of Hit Network. Brine has programmed some of SCA’s biggest metro stations, and more recently led talent development across regional communities. In his new role, Brine will be responsible for overseeing the Hit Network Community division including the new statewide Hit breakfast shows, plus Hit Hobart.

Dan Bradley, who is currently Triple M Melbourne Content Director and Head of Content Victoria and Tasmania, has been promoted to Assistant Head of Triple M Network, overseeing the Triple M Community division nationally, including 38 local breakfast shows. Bradley has an extensive career in radio, including Assistant Group Programming Director at Nova Entertainment, Group Programming Director at DMG Radio and Content Director at Hot Tomato on the Gold Coast.

Bradley will be assisted by the Triple M Group Content Director – Community division team including:

- Dan Hill – North Queensland Community (Cairns/Townsville/Mackay/Rocky/Gladstone)
- Blair Woodcock – South Queensland Community (Toowoomba/Bundaberg/Maryborough) and 4MMM Assistant Content Director.
- Ryan Bebbington – Queensland Community Assistant Content Director
- Jase Allen – Newcastle/Gosford Community Group Content Director
- Duncan Potts – NSW Community (Coffs Harbour/Port Macquarie/Orange/Griffith/Wagga Wagga/Dubbo)
- Mal Lewis – Victoria Community (Albury/Bendigo/Shepparton/Mildura/Warragul)
- Leroy Brown – NSW/Victoria Community Assistant Content Director
- Dan Cole – North West Community Western Australia
- Jarred O’Brien – South West Community Western Australia

- Phil Bradley – Tasmania Group Content Director.

SCA says the state-based content strategy for the Hit Network Community stations will see its Metro Hit Network Assistant Content Directors become Assistant Content Directors of their respective states, that includes their metro role plus assisting programming the Hit Community statewide shows.

This team includes:

- James Speed Victoria Assistant Content Director
- Abi Benaud Queensland Assistant Content Director
- Amy Collette Western Australia Assistant Content Director
- Jase Allen and Adrian Brine are responsible for the NSW statewide show
- Alex Flack (SAFM Content Director) and Mathew O’Reilly (Triple M Adelaide Content Director) are responsible for South Australia’s Mount Gambier.

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Kiloview and Digistor Announce AV-over-IP Partnership

KILOVIEW, A DEVELOPER OF AV-OVER-IP hardware and software solutions, and Australian consultation, design, installation and integration firm Digistor have announced a strategic partnership with the mutual goal of expanding business in the ANZ region. Andrew Mooney, Digistor's Managing Director, stated, "I am extremely excited to be working with Kiloview and offering their AV-over-IP products to the ANZ market. We're seeing an explosion of interest in IP based video delivery, be it NDI, SRT or other more traditional transports and Kiloview is ahead of the curve in offering support for all formats.

"Their product range enables cost-effective remote production, be it on-premise or in the cloud, and complements existing products we represent including those from Telestream, Streamstar and Simplifylive to name a few."

Judy Zuo, Kiloview's Sales Director, also commented on the partnership, stating, "With Digistor's sales network across the ANZ region, this joint partnership provides customers with valuable support to choose the best Kiloview product for their individual needs. We believe the collaboration of Kiloview and Digistor represents

a positive change for the broadcasting industry in the ANZ region."

With the broad adoption of remote video production, AV-over-IP has become necessary for businesses to retain or gain a competitive technical edge. Reliable, low-latency and cost-effective solutions in this space are increasingly important to the media and broadcasting industry. The Kiloview-Digistor partnership brings together flexible solutions in AV-over-IP in areas such as live-streaming, broadcasting and program production.

Kiloview offers a complete solution for AV-over-IP including video encoding/decoding hardware, either stand-alone or rackmount, with H.264/H.265/NDI that supports almost all protocols in the market including SRT, RTSP, RTMP, HLS, RTP, TS-UDP and ONVIF. Also supported is AV transmission over Ethernet, WIFI, 4G-LTE and 5G-LTE. Kiloview has software that supports automatic device discovery and management, which significantly enhances usability for remote production.

Visit <http://en.kiloview.com> and www.digistor.com.au

Blonde Robot Distributes Rotolight

BLONDE ROBOT PTY LTD., a leading importer and distributor of branded products for the professional content creation markets, has announced a new distribution partnership with Rotolight for Australia and New Zealand. Rotolight is a British manufacturer headquartered at Pinewood Studios, Iwer Heath, and brings patented, advanced LED lighting technology to cinematographers and professional photographers around the world.

The Rotolight Titan X2 will be the flagship product from the range being distributed by Blonde Robot. Described as a "revolution in lighting control", the Titan X2 features SmartSoft technology, which allows users to electronically adjust the light's diffusion, focus and spread.

"Rotolight is an established innovator within the LED lighting market for photographers, filmmakers and broadcasters," comments Blonde Robot Chief Executive, Chris Horsley-Wyatt.

"Rotolight's passion for technology is reflected in the Blonde Robot values and we see this intuitive and unique product range as a natural addition that answers the needs of our dealer network and their end-users, alike.

"We are particularly excited about the Titan X2, which launched just 12 months ago. Its in-built capability is staggering and we're excited to hear the feedback from the market."

In contrast to the high-end Titan X2, Rotolight also addresses the impact of the changing working environment. The company has created a lighting kit for effective work-from-home video conferencing that works with the NEO 2.

This, coupled with the AEOS and Anova PRO 2 products completes the distribution offering from Blonde Robot.

Visit www.blonde-robot.com.au and www.rotolight.com

Midwich Group Secures Global Agreement with DTEN

MIDWICH GROUP PLC, a specialist audio visual (AV) distributor to the trade market, is pleased to announce the signing of a global distribution agreement with collaboration solutions manufacturer, DTEN.

DTEN's innovative communications technology creates the ideal environment to communicate and collaborate, regardless of whether in the office or working from home. DTEN solutions are Zoom certified and designed for 'plug and play' integration with the Zoom Video Communications, Inc. platform.

Stuart Mizon, Commercial Director, Midwich Group said, "We are pleased to have signed a global distribution agreement with DTEN. Midwich has seen a substantial increase in demand from our channel partners for DTEN

products in North America, so to be able to extend this partnership around the globe is very exciting. At a time where simple and effective Unified Communications (UC) is a requirement for meeting rooms and a working from home (WFH) setup, DTEN's purpose-built 'Zoom Rooms' and 'Zoom for Home' appliances make it easier than ever for our customers to scale, deploy, and manage meeting rooms within both environments. We look forward to working with DTEN to deliver these solutions across our global customer base."

Email mark.buckley@midwich.com.au

Visit www.midwichgroupplc.com and www.DTEN.com



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Resolutionary: the Achtel 9x7 camera

WITH THE LAUNCH OF the new ACHTEL 9x7 camera, Australian cinematographer and camera inventor Pawel Achtel ACS says the world's largest cinema screens are about to get sharper. Much, much sharper. The 9x7 Digital Cinema Camera is designed specifically for VFX, VR, Giant Screen and IMAX Cinema productions. It features native 4:3 aspect ratio, 65 Megapixel resolution sensor and records uncompressed RAW footage up to 10GB/s – approximately 30 times more than other high-end digital cinema cameras. It also features a back-side illuminated (BSI), APS-H sized sensor with true global shutter and is capable of high frame rates (HFR) up to 70 fps at full resolution. The camera head – which provides the option of all popular lens mounts – measures just 80mm x 80mm x 70 mm, and can be placed up to 20 metres away from the rest of the camera connected via fibre optic cable.

According to Pawel Achtel, the 9x7 Camera significantly exceeds Large Format 15 perf 70mm IMAX film in all aspects of image quality, from sharpness, contrast and colour fidelity to noise and dynamic range.

C+T: Can you talk us through the development process?

"It started a couple of years ago. And I was researching the possibility of coming up with a camera. At the time, we found an 8k x 6k, 4x3 sensor. And during that time, I laid groundwork for the blueprint of the camera, how it would be architected, and how it would work. Although, the sensor that we had at the time, wasn't quite there. The resolution was probably okay, but it wouldn't do high frame rates, and the dynamic range wasn't quite there. Fast forward to January 2020, and a new sensor came to life, became available. It's extraordinary sensor. It's a 65 Megapixel, backside-illuminated sensor, with extremely high sensitivity. And so, we're talking night native ISO between 800 and right up to 4800 ISO, so sees in the dark. It loves darkness. You know, the moon is more than enough to light the scene. The sensor has very high quantum efficiency, which means that it converts a lot of photons into electrons. With 65% quantum efficiency, you can imagine 100 photons are converted to 65 electrons, which is extraordinary. It's much more than most cameras would do that."

And who produces the sensor?

"The sensor is produced by Gpixel, but they make sensors in different grades, and a very low yield sensor. The availability of sensors is not particular high, and we're using the highest grade of the sensor available. It's much more refined and much more tighter spec sensor than what you would get off the shelf. We also have some special features that we can turn on, that are not necessarily available in mass produced sensors. The other unique feature of this sensor is a global shutter, and it can record up to 70 frames per second at full resolution. Obviously, higher frame rates would be available at lower resolutions, but that's up to 70 frames per second. And most importantly, this is a 4:3 aspect ratio sensor, which means it perfectly fits the IMAX and Giant Screen



Pawel Achtel ACS with the 9x7 Digital Cinema Camera.

immersive 4:3 aspect ratio.

"And that's very important, because if you compare it to, for example, RED Monstro sensor, which is 8k by about a 4k, by the time you get it to 4:3 aspect ratio, by chopping the edges, it becomes a 6k camera with only 25 Megapixels, as compared to 65 Megapixels for this camera in 4:3 aspect ratio, so almost three times more pixels. But it's not just that. It's not the pixel count that's amazing about this sensor. It's the quality of the pixel. The sensor allows very high contrast of high spatial frequency detail to be reproduced, so much so, that close to the resulting limit, that contrast is quite high, and the details are a lot more pronounced. The other ingredient is that we take all that data, uncompressed, unprocessed, and record that, which means we don't throw away any information for the compression to work efficiently because there's no compression, and there are no compression artefacts.

"Which brings me to another point, that given the quality of the actual readout, combined with uncompressed format, it allows us more sophisticated workflows, right up to 18.7 x 14k, 260 Megapixels resolution. Now that's quite a mind-boggling number, and it's not easy to achieve, even though the camera is able to deliver the detail. We have lenses, we have focusing, we have all sorts of other production related issues that need to be addressed, but if you get all the ducks lined up, you can actually get that sort of resolution.

"The promo that we've done, which opens up with the night shot, at the opening shot, that is 900% crop, which means you're looking at one eightieth of the actual frame area on the shot. And I mean, Vimeo compression aside, I wouldn't hesitate to use that shot in a mainstream cinema film. It's clean, the detail is there, there's no aliasing that you could see, there's no noise that you can see, even though it was shot at black night with no moon. It's an acceptable shot. Yet, you could imagine 80 of those shots, that are in the frame.

You can try it with any other camera. Try it even with 15 perf 70mm film. It's just not quite as good. That's what this camera is all about."

What lenses do you recommend with this camera, given that it is such a high resolution?

"That's right. Not many lenses can take full advantage of this camera. Physically, you can attach LPL, PL, Nikon, Canon, Leica, many types of lens mounts. In fact, the front plate is compatible with RED lens mounts, so you can physically attach pretty much just about any lens. But, in terms of the performance, there is only a handful lenses, especially when you want to involve those more sophisticated workflows to higher resolutions. I've tested the ARRI Signature Primes, and they seem to be, so far, probably the most suitable lenses for this camera. What's particularly outstanding is that they have very high contrast at those resolutions, quite evenly distributed across the frame. I've also shot some footage with selected Sigma Art Lenses, and there is a couple of very good lenses there.

"There is the 14mm, which has extraordinary, high contrast in the middle of the frame, so that's a really good lens. Not as much as you go away from the centre, but in the middle, it's extraordinary. And 135mm Sigma Art T2, that's probably the sharpest lens I've come across. It's corner to corner, gives us about 30% contrast at the resolving limit of the camera. Outside of that, there is not many choices."

Now, this is all manual operation? There are no auto functions?

"No. I mean, just to give you an idea, if you take a middle shot with the lens, I can discern a different focus mark on the base of your eyelash and on the tip of the eyelash. Now, as a cinematographer, tell me which one I should focus on?"

What's it equipped with in terms of a viewfinder or user interface?

"On the left top, there is an instrumentation panel. That's a unique feature of the 9x7.

Canon Releases EOS C70

CANON HAS LAUNCHED

THE EOS C70 – a compact video camera that combines the image quality of Canon's Cinema EOS System range with the portability and flexibility of its EOS R line-up.

The EOS C70's compact design and professional interfaces makes it suitable for a range of uses including documentaries, news gathering, and events. It also offers multiple recording formats to SD cards – including 4K up to 120 fps in 4:2:2 10-bit in XF-AVC, and MP4 in HEVC (H.265) or H.264.

Canon has also launched Canon Mount Adapter EF-EOS R 0.71x – an EF Lens to RF Mount adapter allowing use of the entire EF lens line-up with the EOS C70. The Mount Adapter EF-EOS R 0.71x employs an optical conversion to capture a Full Frame angle of view of an EF lens even when used with a Super 35mm sensor, as well as increased light transmission of approximately 1-stop. The adapter enables communication between three EF lenses and the camera body – EF 16-35mm f/2.8L III USM, EF 24-70mm f/2.8L II USM, and EF 24-105mm f/4L IS II USM – providing continued support for Canon's range of EF lenses. Auto Focus, peripheral illumination and chromatic aberration correction. The transfer of lens metadata is also supported when using the Mount Adapter EF-EOS R 0.71x3.

The EOS C70 bridges the gap between Canon's Digital Interchangeable Lens camera line-up and Cinema EOS System cameras with the short flange back design of Canon's RF Mount making the compact design of the EOS C70 possible. It has 13 assignable buttons, a multi-functional hand grip for ease of operability, professional input/output terminals including HDMI and 2x mini XLR terminals for audio,



as well as an independent ventilation system. Furthermore, a new, thinner ND filter system gives up to 10-stops of ND filtration, providing filmmakers with flexibility to control exposure while keeping control over the depth of field and enabling significant bokeh, even when using a high-speed lens.

With the Optical IS in RF lenses and the Electronic IS in the camera body provides for stabilisation even when shooting handheld. This communication capability also gives the ability to display the object distance on the camera's LCD monitor.

Taking advantage of its Super 35mm Dual Gain Output (DGO) sensor, seen in the EOS C300 Mark III, the EOS C70 delivers image quality with over 16 stops of dynamic range. Much like the EOS C300 Mark III, the EOS C70 produces the same cinematic colours, clean low-light image quality and HDR acquisition capabilities. Thanks to the DGO sensor, and powerful DIGIC DV 7 processor the EOS C70 is suitable for professionals looking to produce high-quality content in 4K. It also supports slow motion capture with 4K 120p recording – with Dual Pixel CMOS AF support, as well as audio recording. For those who desire higher frame rates, 180p is also available

in Super16 mode. Recording to Dual SD cards in Canon's XF-AVC format with 4K 4:2:2 10-bit, the EOS C70 captures high resolution footage for a wide range of applications.

In addition to supporting Canon's Dual Pixel AF System, it is also the first Cinema EOS System camera to feature the EOS iTR AF X (Intelligent Tracking and Recognition) system seen in the newly-launched EOS R5. The system uses a face and head detection algorithm that works with Face Detection AF to improve focusing on and tracking the subject. The EOS C70 also introduces Auto ISO and a dedicated vertical shooting mode, for social media and digital signage content.

The EOS C70 features recording options at resolutions from 4K, UHD, 2K, and Full HD. The Dual SD card slots support high-speed UHS-II media – with a variety of configurations such as double slot, relay and simultaneous recording.

Canon has also launched the CJ20x5B IASE S, a 2-in-1 UHDx5-class lens with a powerful 20x zoom range and 5mm wide-angle which expands Canon's range of 4K broadcast lenses for 2/3-inch sensor cameras.

Visit www.canon.com.au

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New Fujifilm Premista Lens, PL Mount Box Lens, and MK Lens Mount

FUJIFILM HAS ANNOUNCED the development of the FUJINON Premista 19-45mm T2.9 lightweight wide cinema zoom lens ("Premista 19-45mm") for large format sensor cameras, as well as previewed the SK35-700mm telephoto PL mount box lens. In addition to these items, an MK lens mount developed by Duclos Lenses for the highly anticipated RED Komodo cinema camera has been introduced.

The short, lightweight wide-angle Premista 19-45mm T2.9 expands the Premista family of zooms to three lenses. Joining the 28-100mm T2.9 and the 80-250mm T2.9-3.5, the Premista 19-45mm produces images with natural and beautiful bokeh, outstanding high resolution, accurate color rendition, and controllable flare with minimal ghosting for capturing high dynamic range. The lens shows very little distortion throughout the entire zoom range, lightening the burden of correcting footage after shooting, and allowing high quality cinematic images to be created more efficiently.

"The response we've seen to the Premista lenses since their 2019 launch has been tremendous both in terms of excitement and usage across feature film and high-end TV productions," said Thomas Fletcher, Director of Marketing, Optical

Devices Division, FUJIFILM North America Corporation. "Now, with stricter safety and efficiency needs on set, there is a growing demand for high quality zoom lenses that match the quality and 'look' of prime lenses, and efficiently capture images without the hassle of having to frequently change lenses. The Premista family checks off all the boxes, with no compromise."

The Premista 19-45mm is scheduled for release in early 2021.

SK35-700mm Telephoto PL Mount Box Lens

Fujifilm has also developed the FUJINON SK35-700mm PL Mount Telephoto Box Lens (SK35-700) for 8K television applications, but the company will now be doing extensive market research, exploring the possibility of repurposing the lens in response to the emerging needs of the multi-camera cinema style production market.

The lens features a 20x high magnification zoom, covering a focal range of 35mm-700mm at F2.8 (35-315mm) and F4.8 (at 700mm). The SK35-700 also features a 1.4x extender, which brings the range to 49mm-980mm on S35 cameras while also offering significant coverage on many large format cameras. It is 28" long and weighs 69 lbs.

The SK35-700 is currently the only telephoto PL



The FUJINON Premista 19-45mm T2.9 lightweight wide cinema zoom lens.

mount box lens on the market. Its design provides for unparalleled cinematic imaging in various multi-cam productions.

Duclos Lenses MK-R Mount

U.S. company Duclos Lenses has developed the MK-R Lens Mount, an RF Mount Conversion that makes the FUJINON MK 18-55mm and 50-135mm zoom lenses compatible with a variety of RF mount camera bodies – most notably, the highly anticipated Super 35 format KOMODO 6K camera from RED. Paired together, the setup is extremely small, lightweight, and relatively affordable.

For more information on the MK-R Mount, visit www.ducloslenses.com

Visit www.fujifilm.com.au

Sony Introduces 'Cinema Line'

SONY HAS ANNOUNCED the launch of Cinema Line, a series of new camera products for content creators which will bring together the company's expertise in image quality, attention to detail, technology and passion in digital cinema.

According to Sony, Cinema Line will deliver not only the coveted cinematographic look cultivated through extensive experience in digital cinema production, but also the enhanced operability and reliability that meet discerning creators' various needs. The new series will extend beyond basic cinema camera and professional camcorder form factors.

In 2000, Sony released the HDW-F900, the world's first 24p digital cinema camera. VENICE and other products followed in response to countless dialogues with cinematographers and image creators.

Existing products in the Sony range forming part of the Cinema Line include VENICE and FX9. VENICE has become a first choice for digital movie production, and the FX9 has an outstanding track record in documentary production. The next step is a new model that will appeal to a wide spectrum of visual creators. Sony will be releasing and shipping this next addition to the range, the FX6 camera by the end of 2020.

Each of the Cinema Line cameras will evolve with user feedback: The FX9 Version 3 upgrade, available in 2021, will see the addition of the S700PTP allowing remote control of Sony's camera, a Centre Scan mode for Super 16mm lens and B4 Lens support with its adaptor as well as other features. In parallel, as of November 2020, the VENICE camera will see a couple of additional features in its V6.0 version which will improve its operability in broadcast and live environments.

Cinema Line website – <https://www.sony.net/cinema-line>
Cinema Line video – <https://pro.sony/rewrite/cinematic-look>

Visit <https://pro.sony>



Sony Remote Camera Range to Support Free-D Protocol

AS PART OF ONGOING EFFORTS to help productions work in remote and safe ways, as well as create engaging broadcast experiences, Sony is upgrading its BRC camera range with a new set of features.

Designed for remote production and efficient operations, the v2.1 firmware upgrade to BRC-X1000 and BRC-H800 will allow producers and operators to simplify their VR/AR production workflows. Through this update, the BRC cameras will output tracking data over IP, using the industry standard Free-D protocol.

This enables the cameras to directly feed the pan, tilt, zoom, focus and iris, as well as the position of the BRC cameras in real time, making VR/AR production simple and cost effective without the addition of other tracking devices or systems. Further, this new feature will allow productions to easily incorporate VR/AR into their live content, such as expanded sets or scenery, live animations, e-sports and graphic overlays, thus enriching their production.

Free-D protocol is an industry standard protocol, supported by major AR/VR solutions providers. BRC-X1000 and BRC-H800 are currently under verification with The Future Group (Pixotope), Reckeen, Vizrt and Zero Density, and plan to support integration with other partners supporting Free-D data in the near future.

In the context of social distancing and reduced operational crews allowed, the update will also improve the pan/tilt/zoom operations of the BRC-X1000 and BRC-H800. A reduced minimum speed allows the camera to track more accurately an object on the set and facilitate shot framing. The output will therefore be more realistic and smoother, even with non-professional operators.

What's more, the cameras will now start to focus as soon as the pre-set recall is done, at the same time as the PTZ function, so that the camera movements look more natural. Control when using a physical remote controller such as a pan-bar one will also be supported.

The firmware V2.1 upgrade is available now via Sony's product website.

Visit <https://pro.sony>





SmallHD Unveils Reference-Grade 4K OLED

SMALLHD HAS ANNOUNCED a new entry into the reference-grade monitor space: the OLED 22 4K Production Monitor. Setting what the company says is “a new standard for colour purists”, the OLED 22’s hardware design is built around the Small4K Video Processing Architecture, which provides a range of input/output options with eight 12G-SDI and two HDMI 2.0 ports, all of which enable 4K signal processing. Housed in a rugged, unibody, milled-aluminum chassis that includes 36 individual ¼-20” mounting points along the top and sides, the OLED 22 weighs-in at a total of 9.3-lbs/4.2kg. A removable handle and feet allow for convenient portability.

SmallHD says the OLED 22 display has virtually no image degradation at any viewing angle, providing a real-time image as vivid and pristine as a final output, whether on set or in post.

Monitor features include: 21.6in/55cm screen size, >1,000,000:1 contrast ratio with an absolute black point, 10-bit color depth for nuanced colour fidelity, 3840x2160 resolution, 350nit brightness

level, and 100% P3/135% Rec 709 colour gamuts that generate true-to-life colour reproduction.

Power options include two hot-swappable power inputs: one 3-pin XLR and a slide-on Dual Battery Plate (Gold Mount & V-Mount options, sold separately), which can be attached via the built-in Smart Rail on the rear side of the monitor. Two 2-pin locking accessory outputs add power flexibility for additional devices.

For untethered freedom, OLED 22 is Teradek Bolt 4K compatible: an ideal combination for cable-free, zero-delay video monitoring in 4K 10-bit HDR.

Coinciding with the release of OLED 22, SmallHD is also introducing what it says is its most sophisticated internal toolset yet: PageOS 4. With this new software, users gain easier access to a diverse and customisable array of curated exposure tools and workflows for enhanced production functionality. Beyond a host of



improvements for simplicity and speed, PageOS 4 supports a streamlined colour-calibration experience with Colour Pipe, an intuitive rendering tool that accurately converts log formats into SDR and HDR. PageOS 4 also includes significant upgrades in user page presets, 4K HDR (PQ) waveforms, improved false colour, and dual/quad viewing options – as well as retaining the same dependable features known to users of previous PageOS-equipped monitors.

Visit www.smallhd.com/4K

Firmware Update for JVC's CONNECTED CAM

JVC PROFESSIONAL VIDEO has announced it is furthering its commitment to providing the video production industry with the highest quality streaming solutions in a complete, plug-and-play package with its latest CONNECTED CAM firmware update. Using the open source Secure Reliable Transport (SRT) technology, JVC has added Forward Error Correction (FEC) and Stream Identifier (ID) to its 500 Series and 900 Series CONNECTED CAM cameras.

Adding FEC to JVC's CONNECTED CAM allows for redundant data stream packet loss recovery, meaning that data loss can be corrected before the video must buffer, while Stream ID makes it possible for multiple cameras to stream directly to one device. The company has also incorporated VITC (vertical interval time code) and LTC (longitudinal time code) functions with this latest update, which are essential for live production and synchronized streaming of live events, such as concerts, sports, ceremonies and conferences. The JVC CONNECTED CAM system, which also includes its SRT-enabled BR-DE900 decoder, BR-EN900 encoder and the KM-IP6000 switcher, is an easy to use streaming solution that meets a wide range of budgets. The system's cross-compatibility between brands also means that users can incorporate the latest streaming video capabilities with their existing streaming studio equipment.

The new firmware will be available as a free download from the JVC Professional Video website from the end of September.

Visit <http://pro.jvc.com/prof/support/productupdate.jsp>

Roland, Canon Unveil Facial Recognition Workflow

ROLAND, IN CONJUNCTION WITH CANON, recently showcased the Ver.2.0 update for its V-600UHD 4K Multi-format Video Switcher which now adds “Automatic ROI (Region Of Interest)”, a new technology-assisted camera workflow that blends robust facial recognition technology with Roland's ROI tool. LAN-based PTZ camera control is also included as part of the Ver.2.0 update.

“Automatic ROI” marks the beginning of a new technical collaboration between Roland and Canon, lending technology-assisted workflow enhancements to several of Canon's leading digital cameras and camcorders including the Canon XF405/XF400 Professional Camcorders. The V-600's Region Of Interest windows automatically finds and follows two people within the scene aiding in single operator productions. Ver.2.0 update allows the V-600UHD's Automatic ROI to work seamlessly with the camcorder face-tracking autofocus of these Canon camcorders when using specific firmware, settings, and HDMI and CAT LAN cable.

The Roland V-600UHD adds value to many different production scenarios by letting users transition to 4K workflows as demand and budgets allow, one input at a time. Scaling is also provided on every input with Roland's Ultra Scaler technology, making it possible to use Full HD and 4K sources simultaneously while outputting at multiple resolutions. The high pixel density of 4K camera sources can be leveraged in Full HD workflows as well, for problem-free, visually-impressive productions.

Visit <https://proav.roland.com/global>

Micro Pan/Tilt Mount Head for Mini Cameras



MARSHALL ELECTRONICS has joined forces with high-end pan/tilt head designer BR Remote, to design and build a micro P/T head, the CV-PT-HEAD, for Marshall miniature cameras. The new P/T head is compatible with all Marshall 500 series cameras including the CV503, CV503-WP, CV506, CV506-H12, CV565 and CV566.

The CV-PT-HEAD body is less than 3.5-inches tall and less than 2-inches wide creating one of the smallest P/T footprints available. The CV-PT-HEAD comes with an IP65 weatherproof rating, which means it is dust-tight and protected against water under pressure from any angle. When paired with Marshall's weatherproof CV503-WP camera, the CV-PT-HEAD creates an excellent movable camera position that can be left out in wet and dirty environments. There is a built-in camera power supply delivering a constant 12V to the camera socket as well as camera control data. The input voltage is from 12V to 35V allowing operators to run up to 3000 feet (914.4 metres) with a common 4-pin XLR cable. Unique for a small head, the input socket for power and control data is on the fixed base. This allows for better freedom of movement, with the camera socket on the moving part with the camera.

For seamless plug-and-play, operators can use Marshall's CV-MICRO-JYSTK controller (sold separately) with thumb joystick control.

Visit www.marshall-usa.com



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It allows to monitor the camera pipeline, as well as the rendering pipeline, and give you the vital statistics, so when you record something, you have high confidence that it was recorded, that no frames were dropped, no frames were delayed. It's the real-time diagnostics confirmation. It's an instrumentation screen. In addition, we obviously have the diagnostic logging, that if there was a problem, you can analyse the log afterwards.

"Bottom left, there is also a unique feature, which is a very precise, dedicated histogram, and that can be configured in linear and logarithmic scales. What I mean by precise is that we're able to get the exposure right up to a fraction of a stop before it gets clipped, and we can monitor for every channel in real-time, extremely precisely. Most digital cinema cameras don't have histogram at all.

"When we go to the right top side of the screen, you have some information of the glance, which gives you the remaining time left to record, count whether there were any lost frames. And I must say that I've been shooting with the camera for four months now, and yeah, it's been zero frames lost, extremely reliable results.

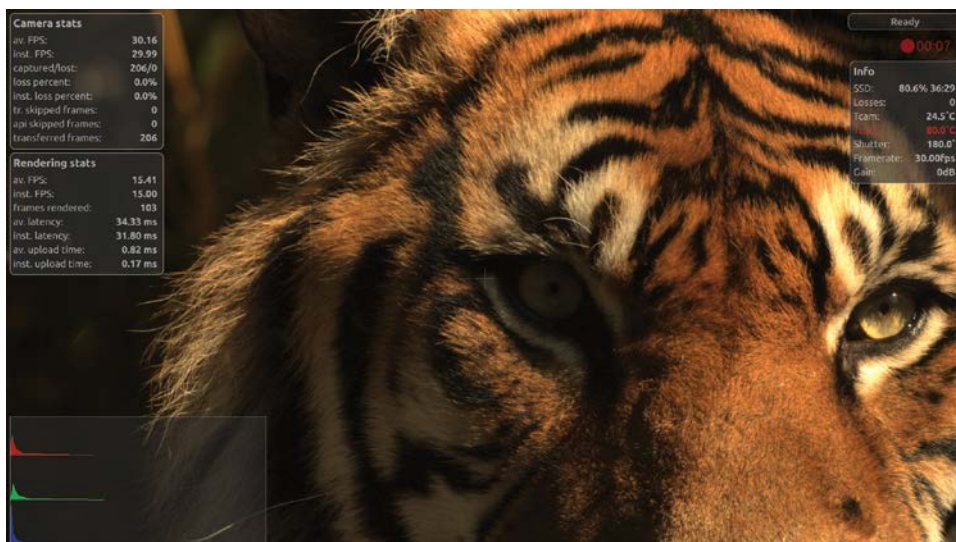
"The temperatures of the camera and the CPU unit are monitored in real-time, shutter frame rate again, and so on. There is a zoom magnify function, which is extremely precise, accurate, and allows to see the many detail of the image, because focusing is absolutely paramount. It's one of those features of the camera that had to be a hundred percent usable. Most cameras can't do that. Once you start and press record button, the image goes into framing and you can see the entire view, but not magnified view. With 9x7, you can see either. You can actually make small focus adjustments as you record and know whether it is in focus or not.

"There are also overlays that we have especially for IMAX flat and dome theatres, where the centre of the frame is not geometrical centred, it's in the lower third of the frame, and the area is elliptical shaped to help with framing. Framing is extremely important with giant screens. You play something in the upper third and the audiences might get a neck injury."

And what is the acquisition format?

"It's a proprietary RAW format, that we have a workflow software that can run on Windows and Linux, and that transforms it into CinemaDNG. And there's a number of features and a number of benefits of doing that. For example, when we record the images, we record the data directly from, as it comes from the sensor. It doesn't have any data manipulation. For example, black shading is not applied at this stage. Flat-Field correction is not applied at this stage. Colour science is not applied at this stage. All this additional data and information is attached with every clip and travels with it, but it travels with it separate. Our software allows that information to be changed.

"For example, if you shot with incorrect black shading, no problem. You can just do black shading afterwards, and apply it to your clips, and it will travel through your workflow. Same with colour science. We don't lock the users with just one colour science, and that's it. If you like a camera different look, or if you want if for artistic purposes, or different lighting conditions, like underwater for example, you can have completely different colour science, and that travels with



9x7 viewfinder with camera performance and rendering stats, histogram and storage/recording time, shutter and framerate information.

every clip, and you can change it for every clip at the same time. It gives you that flexibility."

What sort of times are we talking about for various resolutions?

"At full resolution, 30 frames a second, you have about 40 minutes record time. If you go for the highest frame rates, like 70 frames a second, you will fill that 8 terabytes within about 20 minutes."

What are you recording onto?

"It's 8 terabytes internal storage. And in the near future, we will be announcing external recording and external magazines to be able to transfer the footage very quickly. The recording speeds are astronomical. We're talking up to 10 gigabytes per second."

Once you've shot your footage, how do you get it out? How do you edit it?

"You can offload currently at slow rate using USB3, but you will be as I said, facilitating fast offloads, real-time offload speeds with proprietary interfaces, because as you can imagine, there is nothing out there that would transfer images this quickly. The other thing is they're done on any non-linear editing software, we have very high compatibility and workflows with DaVinci Resolve. All the frame rates, timecode, are seamlessly imported at the same time. In terms of the hardware requirements, it depends obviously on the delivery format more than the acquisition format. The demo video, then I edited on my notebook. Mind you, it was connected to a GTX 8000 card, but nonetheless, it's been edited on the notebook.

What about the camera's performance in extreme environmental conditions?

"Well, it was specifically designed to operate on remote platforms like drones, like underwater housings. Another unique feature that facilitates all that is that the camera can be controlled using a number of different wired and wireless remote interfaces. Instead of making physical buttons on the side of the camera, which make it very cumbersome to operate on the drone on a mo-cap system, or in an underwater housing, we have wired and wireless interfaces that allow me to have controls of the camera on the back of the underwater housing, where it's convenient, or connect to radio control receiver on the drone, or in fact integrate with more sophisticated workflows on the motion control system, where

you need to synchronise some of those functions within the bigger system.

"In terms of the weather and sealing, well, the camera head is robust, it's fully environmentally sealed. The recording unit, not so much, so it needs to be protected from moisture or elements. We are intending to provide a different external casing for the recording unit, but currently this is facilitated with the head and recording module being separated.

Do you see a role for your camera in VFX intensive productions?

"Certainly, the camera integrates with motion control systems extremely well, much better than most cameras. There are some unique features of the sensor itself that facilitates that, and I might just mention one. The sensor has a unique feature called overlapped readout. What it means is that you can read the data of the sensor while the next frame is being acquired, at the same time. If you imagine a camera operating on a motion control system in a triggered mode, that allows you to have full frame rate, up to 70 frames a second, triggering picture by picture, by the motion control system. You can compare that to traditional cameras that do not support overlapped readout, where triggered operation is limited to half the frame rates, because the sensor has to read the information and then acquire the next frame after that, so half the speed. 9x7 doesn't have that limitation."

In terms of availability, are you selling them? Are they going to rental houses?

"A bit of both. We're very flexible on that. There's a few cameras available. We have one here in Sydney, and that's available for rental or any production services. I'm also a DoP, so conveniently we can offer more than just a dry hire. There is a very strong interest from rental houses, and we already had quite a few inquiries. Just a day after our announcement, we had a phone call from LA, 'Oh, we're shooting tomorrow. Can we have one on set? It's already approved, everything, and we just need one.' And I said, 'Oh, we can't do it from Sydney that quickly, but yeah, maybe next one.'"

See footage shot by the 9x7 at <https://vimeo.com/454556452>

Visit <http://achtel.com/9x7/>



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NZ's Virtual Eye Uses AWS to Virtualise Remote Sports Production

VIRTUAL EYE IS THE SPORTS DIVISION of New Zealand-based Animation Research, LTD, which is one of Australasia's leading 3D computer graphics production houses. For more than 25 years, Emmy Award-winning Virtual Eye has specialised in 3D TV graphics that revolutionise the way fans watch high-profile sports, and has delivered those experiences on multiple platforms for events such as the Ryder Cup, The Open Championship (The British Open), the US Open, the America's Cup, Formula 1, The Olympics, World Rally, Red Bull Freeride Tour, The Ashes, and both the PGA and European golf tours.

Typically, Virtual Eye teams travel around the world to provide on-site production support and create 3D graphics that help broadcasters deliver compelling stories to viewers as sports action unfolds. In golf alone, ARL and Virtual Eye cover more than 90 tournaments a year across Europe, Asia, the Middle East, Africa and the US, and have an average of 30 projects under way at any given time. "Helping sports programmers share great stories with fans is in our blood," said John Rendall, Head of Technology and Innovation for ARL.

But 2020 has not been a typical year. In the space of fewer than 24 hours, "Friday March 13th – a bleak Friday if ever there was one," recalls Ian Taylor Managing Director of ARL, COVID-19 hit international sports and ARL's sports business came to an unexpected and sudden halt. This presented a challenge for Virtual Eye, which traditionally deployed crews of up to 12 people to locations around the world for on-site production.

"More than 80 percent of our annual revenue is driven through our sports focused business (Virtual Eye)," said Taylor. "When COVID-19 hit, we were faced with the daunting prospect of 'what's next?'"

Not only did it become a major risk to have their operators roaming around the world but countries, including New Zealand, were already closing their borders. Rendall and his tech team had to think about how ARL could deliver to its clients if sporting events around the world resumed, but the ARL team couldn't be on site to support them.

"We had to devise a platform that would allow us to do everything remotely from New Zealand. The flexibility, scalability, and security of AWS was the answer we needed for cloud-based remote production operations," said Rendall.

"Other platforms were complicated to use," Rendall added. "Having access to off-the-shelf services, a good set of APIs in order to access them and fine applications to go with them has really made a difference for us. That is a really big benefit for a company that has to move as quickly as we do. We have 30 to 40 projects going at any one time, and, because we're a relatively small company, we need to be able to find products and services that can deliver what we need with the minimal effort."

Now, by leveraging the AWS-powered architecture, ARL provides a high-capacity bridge

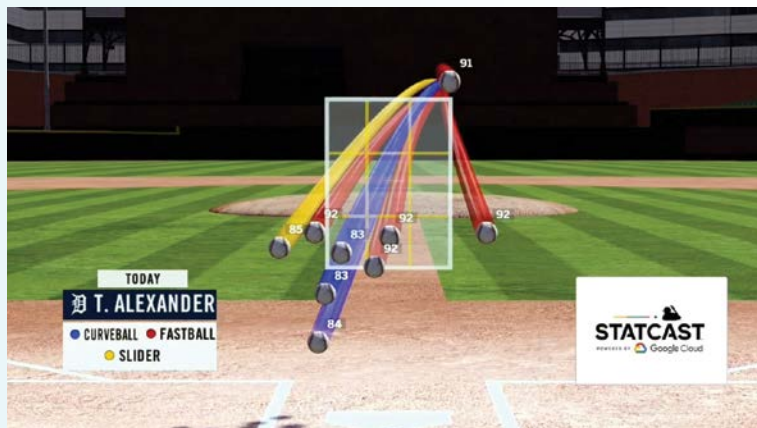
between remote on-site productions and Virtual Eye offices in Dunedin, New Zealand without having to deploy crew to manage operations at multiple remote sports venues. Using AWS global infrastructure and services, including AWS Elemental MediaConnect, Virtual Eye is able to provide full, virtual operations management. This enables broadcasters to deliver live video from remote locations and provide secure exchanges of live video feeds between sports venues and

central operations in New Zealand with minimal latency to ensure optimal viewing experiences. To further assure secure content delivery over its network, ARL uses AWS Virtual Private Cloud with site-to-site VPN and AWS Global Accelerator, a managed service that improves the availability and performance of applications with local or global users to meet broadcasting standards.

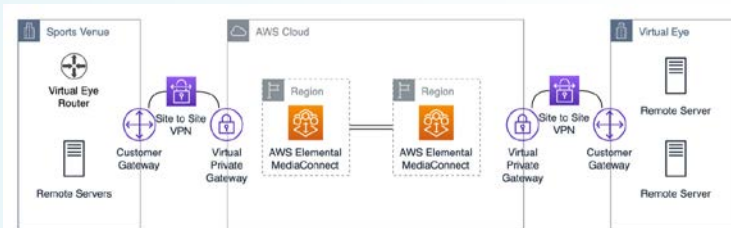
"I don't have a technical background," said Taylor, "but as soon as John showed me what Media Connect could deliver to solve this problem we had, it was a no-brainer for me. Moving video around the globe is always challenging and expensive, whether you were using satellite links or dark fiber lines. Media Connect allows companies like us and a lot of broadcasters to do this without the huge costs associated with it previously. AWS has such a good array of services. And a lot of our customers are using the same tools we are."

The AWS architecture was put to the test at one of the first sporting events back after the initial COVID-19 shutdown, the Charles Schwab Challenge PGA golf event in Dallas/Fort Worth, Texas. From 7500 miles/1200km away, Virtual Eye provided CBS Sports with augmented reality, virtual ball tracking and other graphic elements, rendered in real time, for the enjoyment of fans at home.

"The system worked flawlessly," said Rendall. "We have now delivered every tournament for the past



Virtual Eye supplies its data-driven graphics and virtual stadiums to MLB's StatCast 3D. Broadcasters are taking advantage of the MLB tool, producing their own reviews and recreations.



Virtual Eye's AWS Elemental MediaConnect workflow.

three months and we are currently gearing up for both the US Open and The Masters."

"Because we built our platform around AWS, it's opened up new doors of opportunity for us. We are at the other end of the world and we still are able to reach distant places thanks to AWS. If we can do it from here, we can do it from anywhere. That's the kind of reliability and confidence we can now provide our clients," Taylor said. "Additionally, AWS is accelerating our speed of innovation into machine learning use cases, giving us the ability to automatically track players in the field using ML vision to provide a wealth of insights and analytics to different stakeholders from viewers to coaching staff."

Both Rendall and Taylor also saw the AWS cloud video infrastructure as an opportunity for Virtual Eye to reduce its carbon footprint.

"We originally planned to deploy a more sustainable model for remote production three to four years from now," said Taylor. "Due to COVID-19, we accelerated our sustainability initiative. With the help of AWS, we are able to support multiple simultaneous remote productions without having to deploy large crews and to reduce crew size by an average of more than 80 percent for multi-day events."

Visit <https://aws.amazon.com/mediacconnect> and <https://virtualeye.tv>

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Sky Racing Boosts Live Streams with Digistor and AWS

MULTI-CHANNEL THOROUGHBRED horse race broadcaster Sky Racing recently expanded its use of AWS Elemental Live encoders. Sky utilises AWS Elemental Live for the adaptive bit rate encoding and Apple HLS packaging of thoroughbred horse racing content for live streaming delivery and now stream over 40 live video channels simultaneously, using AWS Elemental Live encoders supplied and supported by Digistor.

Sky Racing is also making use of AWS Elemental Quality Defined Variable Bit Rate (QVBR) encoding. QVBR maintains consistent quality video encoding whilst only using the minimum bit rate needed at any given time to maintain a user defined target video quality level, by continuously adapting to the complexity of the video content. Scenes with less motion and less image complexity – such as results being shown, or video footage of horses being in the parade ring – will use a lower video bit rate to encode with a given high video quality, than, for example, complex fast-moving video footage of horses during a race. The latter, more complex content will automatically be allocated a higher video bit rate to maintain the same target quality level. Using QVBR, Sky is able to continually optimise video bit rates for the content, yielding lower average video bit rates overall whilst still maintaining consistent high video quality.

Sky's key requirements for live stream encoding are to maintain consistent high video quality when streaming demanding content, whilst

at the same time using the minimum possible video bit rate required in order to control content distribution costs. Live stream encoding must also deliver video streams with low delay and with highly reliable 24x7 operation.

Sky uses AWS Elemental encoding software installed on high performance turnkey on-premises hardware to maximise the number of video channels that can be encoded per device from uncompressed video feeds originating at its Sydney broadcast facility.

Sky also makes use of the AWS Elemental Conductor Live management system in order to manage encoding. AWS Elemental Conductor Live offers Sky centralised control and monitoring of all live streaming channels including features such as automatic changeover to back-up systems, thus ensuring reliable 24x7 operations.

In order to encode an additional 16 live video channels simultaneously for the new Sky Racing Active Service, Sky purchased two AWS Elemental Live L525AE encoders, each performing adaptive bit rate live stream encoding for 8 HD video channels.

The AWS Elemental Live encoders take in uncompressed HD video channels from Sky's playout centre. Each channel is encoded into video streams at the multiple different video resolutions and bit rates in which Sky needs to deliver to viewer devices. These video streams are then packaged as Apple HLS video segments for delivery via content



distribution networks to a wide variety of consumer devices including phones, tablets, web browsers and connected TVs. The AWS Elemental Live encoders are also equipped with high-speed optical Ethernet interfaces to support SMPTE-2110 uncompressed video over IP inputs. This gives Sky a future-proof solution as it migrates from traditional HD video over coax cable infrastructure to video distribution over IP networks within their playout centre, both of which the AWS Elemental appliances can support.

Sky Racing has also purchased multiple AWS Elemental Live L532AE multichannel encoders to provide up to 48 HD channels of live streaming encoding for a disaster recovery facility in order to further strengthen its operations by backing up all of the live stream encoding from their primary site at the disaster recovery site.

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Dream Chip Super Slow Motion Camera

BUILDING UPON its existing range of mini cameras, Dream Chip has now added the ATOM one SSM500 to its range. A Super Slow Motion camera capable of recording 500fps in full HD resolution (1920x1080), the ATOM one SSM500 is claimed to be the smallest high-speed camera on the market, measuring only 190mm x 60mm x 60mm. This combination of small size and crisp, detailed slow-motion output makes the ATOM one SSM500 perfect for applications in a range of contexts – and particularly that of sports broadcast.

Compatible with both B4-Mount and C-Mount lenses, the ATOM one SSM500 is remarkable for the level of flexibility it provides in both outputs and control. With soon-to-be implemented IP control along with standard RS 485 connection, the camera also uses open protocol so that it remains compatible with a range of remote-control options from vendors such as CyanView, Skaarhoj and Antelope.

The intuitive GUI shipped with the ATOM one SSM500 also enables the connection of up to 99 other Dream Chip cameras, allowing for comprehensive but clear control of all the expected image output options; from elements such as framerate and resolution, to memory and recording buffer status, to white balance and exposure. Indeed, the Atom one SSM500 has multi-matrix colour correction to ensure perfect match with other cameras being used for the broadcast – a feature that is unique in cameras of this size and FPS capability.

The workflow associated with the camera is also simple, whilst still providing user flexibility. There are two different operational workflows: the first allows for Super Slow Motion capture through 2, 3 or 4 phase connection to any server, facilitating capture at up to 240fps. Alternatively, a 'trigger' mode can be used, giving the ability to capture up to 60 seconds of 500fps footage, which is stored in the internal memory. Switching between modes is easy, and the camera can be setup to start in the preferred workflow setting. This flexibility in application allows for broadcast professionals to make use of the camera in a way that best suits the needs of their existing practices and workflows.

At the size which Dream Chip has achieved with the ATOM one SSM500, it can capture crystal clear slow-motion sports footage from unusual and innovative angles; embedded within the pitch, on goalposts or anywhere close to the action.

Visit <https://www.atom-one.de> and www.proaudiotv.com.au

Digital Nirvana and Adobe Automate Closed-Captioning for US Tennis

DIGITAL NIRVANA, a provider of leading-edge media-monitoring and metadata generation services, has announced that its Trance automated postproduction captioning solution with advanced AI is powering the closed captioning workflow for the United States Tennis Association (USTA), the US governing body for tennis. Integrated with Adobe Premiere Pro, Trance improves the speed and efficiency of the USTA's caption generation process while freeing technical personnel to focus on the creative aspects of their jobs.

"The USTA aims to give tennis enthusiasts access to its content with minimal delay, especially when it pertains to live events or other timely content – something it couldn't do with its old captioning process. Now with Trance seamlessly integrated into its Adobe postproduction workflow, the league gets a rapid turnaround time that is virtually unheard of in the captioning industry," said Russell Wise, senior vice president of sales and marketing for Digital Nirvana. "Not only that, but the USTA has the industry's highest caption-quality standards, with captions that are virtually 100% accurate and display with minimal delay, as the words are spoken."

The USTA's previous captioning process was time-consuming and inefficient, relying on manual tasks and transcripts generated by a third-party speech-to-text service. Previously, video personnel were required to copy and paste text from the transcripts, line by line, onto the video timeline and manually enter timecodes. Depending on the duration of the video program, captioning was taking several hours – an unsatisfactory turnaround. Now with Digital Nirvana's new AI-powered workflow Trance combined with the power of Adobe Premiere Pro, most of the manual work has been eliminated and captioning is provided in a fraction of the time.

Since moving to Digital Nirvana, the USTA production team has been able to cut the turnaround time for captioning an average video title from hours to only 30 minutes, with the captioning task completely offloaded from the technical team. In a typical captioning workflow, a video technician simply drags the clip to a "hot folder" in the Digital Nirvana media service portal. The clip is then automatically uploaded to the processing centre, where the Digital Nirvana team uses AI-based speech-to-text algorithms to generate a transcript, validate its accuracy, and then burn captions into the video. Once complete, the captioned video is automatically uploaded to the Premiere Pro timeline.

Digital Nirvana's Trance application unites cutting-edge STT technology and other AI-driven processes with cloud-based architecture to drive efficient broadcast and media workflows. Implementing cloud-based metadata generation and closed captioning as part of their existing operations, media companies can radically reduce the time and cost of delivering accurate, compliant content for publishing worldwide. They also can enrich and classify content, enabling more effective repurposing of media libraries and facilitating more intelligent targeting of advertising spots. The latest version, Trance 3.0, has a text translation engine that simplifies and speeds captioning in additional languages and automated caption conformance to accelerate delivery of content to new platforms and geographic regions.

Visit www.digital-nirvana.com

Tedial Boosts Automated Sports Production

TEDIAL HAS ANNOUNCED a number of new features for SMARTLIVE, its automated live sports production solution.

Consistently updated, SMARTLIVE has several features and functionalities incorporated for increased fan engagement. Broadcasters can now deliver improved and more vivid graphics thanks to a new integration between SMARTLIVE and Singular.live's cloud-based technology for live graphic overlays. Graphics can be inserted into the SMARTLIVE auto-generated EDL, reviewed in the player and then burned in when the EDL is flattened. This gives broadcasters the capability to enhance storytelling by layering

graphics on top of highlights. In addition, SMARTLIVE can now create transitions between EDL segments, such as fade in/fade out, adding a dynamic element to highlights. Providing an additional advantage for remote production Tedial's player allows users to review content in different low-res quality with an automatic adaptive bit rate depending on the quality of the connection.

SMARTLIVE is also now connected to a video AI engine to detect replays into the video live stream or file to provide even more advanced storytelling, making highlights more dynamic.

Utilising AI tools, SMARTLIVE leverages its

metadata engine to automate clip creation to distribution – including tight integration with social media. It also automates the event metadata ingest process; automatically provides a production environment for the production team; provides multiple, instantaneous live searches to bring historical media and informational archives to live events; and automatically generates highlights, delivering them to digital platforms and social networks as well as traditional broadcast distribution channels as it's directly connected to the production environment.

Visit <https://www.tedial.com>

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Mandi Wicks Named SBS Director of News and Current Affairs

AUSTRALIAN MULTICULTURAL BROADCASTER

SBS has appointed Mandi Wicks as its next Director of News and Current Affairs. Currently SBS's Director of Audio and Language Content, she will take on the new role from late September 2020.

Mandi will replace outgoing Director of News and Current Affairs, Jim Carroll, who announced his retirement in March and will work with Mandi to ensure a smooth transition prior to his departure later this year.

With a 30-year career in the media industry, Mandi has extensive experience working in news, editorial and management roles, including a decade at SBS. For the last nine years, she has been leading SBS's Audio and Language Content division, responsible for delivering trusted and award-winning news and information, along with music channels, to Australia's diverse communities in 68 languages,

across digital platforms, as well as radio and digital television.

Mandi began her career as a journalist before moving into news management roles, working at the Macquarie Radio Network and Southern Cross Austereo. Prior to joining SBS, Mandi was General Manager of DMG Radio Australia (now Nova Entertainment) in Sydney, where she assisted in launching the Nova Network.

During her time at SBS, Mandi has led the transformation of SBS's audio and language content offering, evolving its language services and delivery platforms to ensure SBS meets the changing needs of Australia's multicultural society. She has driven the ongoing development of SBS Radio's digital services, which has seen SBS's in-language content reaching more Australians than ever before, and has also played an instrumental role in ensuring the unique stories of communities accessed by SBS Radio programs are shared with

more Australians across the wider SBS news offering.

SBS Managing Director James Taylor said: "Mandi is an exceptional leader and innovator, with an unimpeachable commitment to news, broadcasting and to serving Australian communities. Mandi demonstrates an unrelenting dedication to SBS's purpose in everything she does. Mandi's leadership of a diverse and complex team of over 300 staff – and their unrivalled connections with communities – is critical to SBS's unique offering in the Australian media landscape. Her pursuit of excellence, trusted leadership and digital expertise will continue to be invaluable to SBS as we continue to strengthen our commitment to communities."

Visit www.sbs.com.au



NDI Integration with Microsoft Teams

NDI, PART OF THE VIZRT GROUP along with NewTek and Vizrt brands, has announced that NDI technology is now integrated with Microsoft Teams,

making it a key part of any video production workflow.

With video dominating communication on a global scale, the addition of NDI to Teams allows for versatile video workflows through a Teams meeting. Broadcast engineers can access the video feed of the Teams meeting participants, the screensharing feed, and Together Mode. NDI and Teams offers the ultimate in production flexibility, allowing video content producers to move video – and move the world.

"Microsoft Teams is the forerunner of video conferencing technology globally. Integrating NDI into Teams dramatically expands the visual storytelling power of the platform," commented Michael Namatinia, president of NDI for the Vizrt Group. "As we all seek to expand and refine our video capabilities, NDI combined with Teams gives storytellers a new frontier of creative possibilities waiting to be explored."

NDI is one of the most widely adopted IP-based video delivery standards in the world. The integration of NDI into Teams offers a high quality, seamless transition from any video stream. Single or multiple Teams meeting attendees can easily be added into any production, each as unique a camera source.

Visit <http://www.ndi.tv>



Wireless Teleprompting Scroll Control

AUTOSCRIPT HAS ANNOUNCED the WC-IP wireless teleprompting scroll control, designed to empower on-air talent in a live news broadcast to scroll a prompting script themselves from anywhere in the studio.

The WC-IP offers a compact, ergonomic design that sits discretely in the palm of the talent's hand, with a forward/reverse joystick that enables intuitive scrolling of the text. The controller features three story navigation buttons and two programmable function buttons that give talent even more control options. All buttons are managed within Autoscript's WinPlus-IP teleprompting software and can be enabled, disabled, or assigned as required.

The WC-IP can be quickly configured and paired with Autoscript's WB-IP base station within WinPlus-IP, which also provides connection status and monitoring for the control's integrated, long-life battery. The control features a discreet LED status display for the battery, which can be easily recharged using a standard USB-C cable. Each WC-IP connects with a single WB-IP base station and will maintain connection over a distance of up to 100 meters/300 feet, ensuring that even the largest productions and the most mobile on-screen talent enjoy uninterrupted and smooth scrolling of the prompter script at all times.

Visit www.autoscript.tv

9news Darwin Returns to Live and Local

NINE HAS EXPANDED its 9News Darwin to a dedicated one-hour local bulletin on week nights at 6.00–7.00pm. According to the network, 9News Darwin represents an increase in Nine investment in local content in Darwin.

The bulletin, presented by Paul Taylor, will provide Darwin viewers with the most up-to-date local, national, and international news, sport, and weather reports captured by a team of dedicated reporters and crew on the ground.

Steve Shervill, Nine General Manager Darwin, said: "Investing in more local stories has never been more important within this challenging COVID-19 climate and our team on the ground are well equipped to deliver news that matters, as it happens, from here in Darwin and throughout the Territory."

Kate Limon, Network Regional News Director,



said: "9News Darwin is back, live and local, to shine a spotlight on stories that matter to all Territorians.

Our journalists and camera operators are locals, they know the issues that affect the NT, and local audiences can continue to rely on 9News as their most-trusted news service."

Visit <https://www.9news.com.au/northern-territory>



Sony Expands Remote Solutions

SONY'S ELC IS DESIGNED

specifically for streamlined news production, and with, amongst others, four major US broadcast groups representing over 60 ELC installations have been operating during the crisis using ELC remotely. It means the production control operations can be fully distributed or for a single home-based operator to direct the production remotely. In parallel, commentators, anchors and floor directors can be working from different locations using ELC, which means any news can be produced by a team of experts located anywhere in the world.

As a part of Sony's efforts to support the media industry during the current health crisis, existing customers could remotely operate their XVS Switchers, leveraging the Virtual toolsets available such as Virtual Menu, Virtual Panel & Virtual Shotbox. During the pandemic, Sony offered these capabilities for free, on a trial basis. By using this remote operations set-up, operators and technical staff were able to work from home or a remote studio. This software has been used in major broadcasters in Europe and North America, as well as eSports program production in South Korea.

The recently announced BRC cameras update will allow output tracking data over IP, using the industry standard Free-D protocol. These cameras, with their enhanced PTZ capabilities, require a minimal number of operators, who can work on several cameras remotely at the same time.

IP Live solutions from Sony have already been adopted by more than 100 customers worldwide. Launched in July, the HDCE-TX30 solution enables the HDC-3500 and previous generations of HDC cameras to become IP native, again opening up new possibilities for remote production. It allows for greater workflow stability and resource sharing, which is key for any customer investing in remote & fully distributed production. New licenses for HDC-3500 and HDCE-TX30 enable IP HFR and IP 4K remote solution from March 2021.

After remote production comes virtualisation as the next natural step. As part of a strategic partnership, Nevion and Sony have been contributing to the 5G Virtuosa project since July. This project, in part funded by the European Union, aims to harness the rapidity of 5G connectivity and Scalable Software Defined Network architectures for



cooperative live media production, by exploiting virtualised production resources. The first part of the project has been successfully delivered even during the lockdown period, thanks to the IP connectivity such system has natively.

For broadcasters already looking at the next step for their setup, a move to a fully distributed and cloud native infrastructure will ensure yet more safety and savings on resources. Between its Virtual Production Service Hive, Ci Media Cloud Services, NavigatorX and a set of media workflow micro services that help tailor modern workflow architecture to specific needs, Sony has a full portfolio of solutions and services for future proofing production infrastructures.

News companies have been using Sony's Cloud based Hive solution for the last few years. With 2500 journalists in 200 locations spanning across the world, Reuters has partnered with Hive, Sony's centralised production platform that allows worldwide bureaus to collaborate on stories across different time zones.

The latest addition to Sony's cloud-based offerings, the Media Analytics Portal, will be available in October 2020. As programme makers rethink their production workflow, they need tools to monitor content flows, provide rich metadata and analyse outputs. Media Analytics Portal will bring these capabilities to their fingertips and will automate processes, freeing up time and creating new efficiencies.

For streaming concerts, festivals and corporate events live, Virtual Production, Sony's cloud native live production switcher, enables multi-camera production without the need for any dedicated infrastructure. It can be used as the user requires, leveraging a pay-as-you-go model. The next release coming this October 2020 will add new capabilities, such as Screen Sharing input, Webcam input, Clip Playlist and many more.

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Linear Keyer for Both IP And SDI



CRYSTAL VISION HAS RELEASED a linear keyer that works with IP (SMPTE ST 2022 and ST 2110 video), with SDI or with both IP and SDI at the same time. The M-KEY can key one externally-generated graphic over a video stream or a matte and is a traditional linear keyer designed for those who use a character generator or graphics PC to provide their key and fill sources. The M-KEY is ideal for a wide range of channel branding and graphic overlay applications, while the mixed IP/SDI I/O means that it can provide a cost-effective solution for those using SDI caption generators to key into an IP feed, with the SDI to IP conversion included in the cost of the keyer. The M-KEY is a software app that runs on the MARBLE-V1 media processor hardware, a card housed in the Vision frame which features a powerful CPU/GPU processor and both SDI and 10GbE IP network interface connections.

The M-KEY offers the user a choice of keying modes – with the key generated using either

External Key mode or Self Key mode and with both additive and multiplicative keying available to suit different types of graphics. The keyed graphic can be faded in and out, either manually or as a timed transition,

while crops can be used to prevent keying in particular areas of the picture by forcing areas of background or foreground. The Min Clip and Max Clip controls can be used to change the key gain, with adjustable thresholds to force or remove areas of key – ideal for compensating for a key signal which does not have enough amplitude to force full keying or for creating a semi-transparent effect for the graphic.

The M-KEY's support for multiple signal formats eases any SDI to IP upgrade, while also making it perfect for mixed SDI and IP installations as well as fully IP or fully SDI environments. The M-KEY's gateway functionality can be used to integrate SDI into an IP environment or IP into an SDI environment. Its IP to IP translation functionality can be used for network address translation, protocol conversion between any of the input and output formats, unicast to multicast address conversion and the creation of media firewalls. The IP flows can be separated and protected across

up to four bi-directional 10GbE SFP+ network interfaces. It includes output traffic shaping and is tolerant of any input packet distribution.

The M-KEY includes a number of timing features to help with system integration. These include a framestore synchroniser timed to an external Black and Burst or tri-level syncs analogue reference or PTP, with user configurable options for timing source priority and redundancy. Additional video delay – adjustable in one frame steps – is also available both on the input and output. The ten frames of flow input video delay allow delay compensation between the background source and two foreground sources – useful as the fill and key coming from a graphics machine may arrive several frames later than the background programme video. The ten frames of flow output video delay allow compensation for any big system delays.

Other features include a quad split which allows the Output video, Output key, Keyed foreground and Keyed background to be viewed simultaneously, with zoom available for fine-detail checking during setup. Comprehensive SDI, IP and PTP monitoring information is available and can be used to generate SNMP traps, while 13 built-in test patterns can help with fault finding. The flexible choice of control options include the VisionPanel touchscreen control panel, VisionWeb Control web browser software and complimentary SNMP – while 16 time-saving presets can be assigned and recalled.

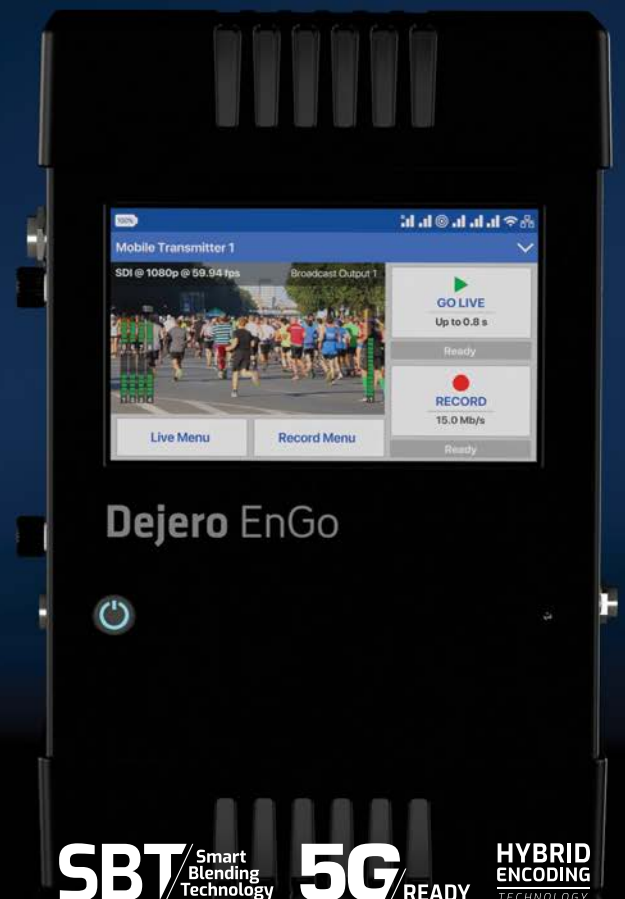
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Live Streaming with Video-Call Management

MULTICAM SYSTEMS has unveiled AIRBRIDGE+, a hardware-based video controller, call-in manager, CG and streaming engine — all in one package.

With AIRBRIDGE+, four guests can be live simultaneously and up to 12 guests can be on the waiting list. Operators simply send a link to their guests. And with that link, they can join the show from anywhere, using their smartphone, tablet or computer — no app needed!

Suitable for radio, podcast, small Web TV or event productions, AIRBRIDGE+ includes video call queue management and is compatible with A/V standards (AoIP in/out, NDI/SDI outputs).

It's one of the few professional video calling solution that lets users control the video settings (scale, position, picture) of remote guests; automate mix-minus audio of all participants; adjust audio delay for each guest's connection; and send the video program to guests.

AIRBRIDGE+ also provides access to full production and live streaming capabilities. Whether you want to record the live stream and edit the recording later, or take snippets for use on social media. The system's innovative PTZ camera integration allows you to create compelling video footage that entices viewers, while increasing productivity.

With AIRBRIDGE+ you can efficiently create interactive and engaging content and even repurpose it later to drive people to your website, increasing traffic and revenue.

Visit www.multicam-systems.com



TVU Networks Adds Audio Mixing

TVU NETWORKS HAS ADDED an audio mixing panel as a feature to its cloud-based TVU Producer multi-camera, cloud production solution. With TVU Producer, novice or experienced video producers can remotely produce multi-camera live events with zero latency - even when using smartphones as production cameras.

According to TVU Networks' CEO Paul Shen, "The Audio Mixing Panel enables an audio production crew to manage audio production from a separate location than video production. The mixing function is extremely easy to use and gives the audio operator full control over program audio. As part of our continued expansion of remote production capabilities, this is one more piece that enables all crew - whether they're a graphic artist, video or audio production crew, instant replay operator, commentator, or producer - to be part of a professional production operating from a safe location such as their homes."

TVU Producer's Audio Mixer Panel feature adds familiar audio mixing capabilities to TVU Producer. With a simple, browser-based UI, operators have full control of all audio signals from their home. With touch-screen tablet computers, users can operate the Audio Mixer Panel via touch. With TVU's patented time synchronization technology, the solution provides zero latency execution of production commands, as well perfect synchronization between audio and video, while crews operate remotely and safely from their own locations.

TVU Producer enables production and streaming to social media channels, websites and web streaming platforms, as well delivery to traditional SDI infrastructure without any hardware, software or training. TVU Producer can accept any standard IP video sources (HTTP, HLS, RTMP, RTP, RTSP, UDP, etc), as well SDI signal via any IP encoder, or TVU transmitter. It can use any mobile device as a camera via the TVU Anywhere app.

Integrated within TVU Producer is TVU Partyline, which enables production personnel, talent and tools to collaborate remotely in real time with full HD video quality and perfectly synchronised audio and video.

Visit <https://www.tvunetworks.com>

GRAPHITE

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The **Graphite Portable Production Center (PPC)** offers a complete production solution in a compact carrying case.

This powerful **all-in-one** portable platform, has unmatched ease of use with **big switcher performance**, **XPression graphics**, **instant-access clip servers** and **pristine RAVE audio**. Graphite PPC is easy to set-up and its ultra-quiet fan means it can be deployed just about anywhere, even next to on-air talent!

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(Valid until October 31st, 2020)

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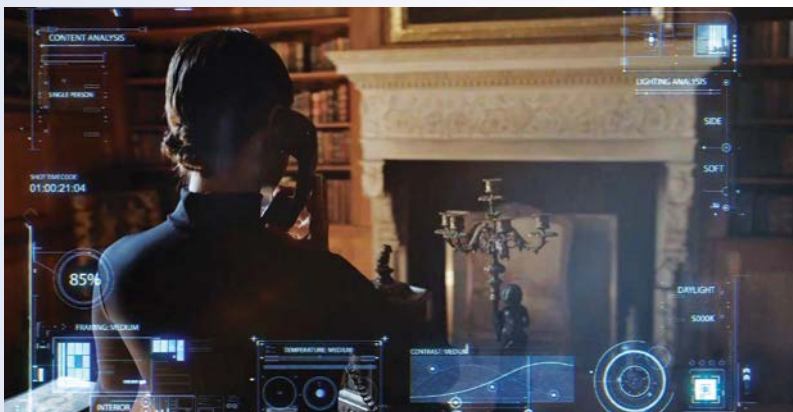
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Colourlab Ai Set to Revolutionise Colour Grading with Artificial Intelligence



Content analysis within the Colourlab Ai colour grading system.

COLOR INTELLIGENCE, a Hollywood-based start-up, has unveiled its Colourlab Ai software, a colour grading system that the company says will dramatically improve the process of colour correction thanks to Artificial Intelligence. Founded by colour scientist Dado Valentinc and industry veterans Mark L. Pederson and Steve Bayes, Colour Intelligence has established itself as a high-end image processing consultancy. It has been working with Warner Brothers, HBO, Netflix, NBC Universal, and CBS on advanced HDR colour pipelines and providing specialised colour grading plug-ins for look design and creation.

After more than three years in development, Colour Intelligence is now offering access to its AI technology for the first time with a public release in October.

Using advanced AI models trained for cinematic content, Colourlab Ai makes it simple to automatically colour match footage from a graded clip or reference image. Instantly matching scenes across an edited timeline or matching hours of dailies, Colourlab Ai offers time-savings by leveraging AI to eliminate the manual and tedious aspects of the colour grading process.

"When you have masses of material to colour match, it can consume all your time and energy, so that when it comes to the craft grade, you're already maxed out," Valentinc explains. "Colourlab Ai analyses the composition of the shot to describe the colour characteristics of footage – whether it's a close-up shot, an exterior shot, daylight or nighttime, etc. The AI 'understands' how humans see, and it uses human perceptual transforms that are vastly more accurate than standard algorithmic methods."

Rather than rendering colour into a timeline, Colourlab Ai presents the AI-generated adjustments in the form of non-destructive metadata settings, as the industry standard familiar controls of ASC CDLs, Lift Gamma Gain or even Printer Lights. This approach allows colourists, cinematographers, and content creators to continue making subjective and creative adjustments throughout the post production process.

"Achieving a high-end result in colour grading is extremely challenging for many content creators as they lack the resources of Hollywood productions and access to the most talented colourists in the industry. Colourlab Ai flips the grading process on its head by essentially removing the manual part which requires extreme skill and technical expertise, and puts the focus purely on the creative," commented Mark L. Pederson, COO of Colour Intelligence.

Steve Bayes, former Avid designer, and Apple Pro Video Product Manager, responsible for Avid Symphony, Final Cut Pro, and FCP X, provided angel investment for the development of Colourlab Ai and came aboard as a company advisor earlier this year.

"This software has the potential to save filmmakers hours or even days of work, with a Metal accelerated single step to process and colour match 24 hours of dailies in less than 15 minutes," said Bayes. "We can deliver consistent, high-quality results across all shots. No preset is ever going to be able to do that – and that is the genius of Colourlab Ai."

In its early stages, Google and Nvidia supported Colour Intelligence's artificial intelligence R&D efforts. The company was also selected by Silicon Valley incubator program, Y Combinator start-up school.

Visit www.colourlab.ai

SIGGRAPH Asia 2020 Goes Virtual

WITH ONGOING WORLDWIDE travel restrictions due to the COVID-19 pandemic making it impossible to host an in-person SIGGRAPH Asia 2020 in Daegu, South Korea, in November, organisers of the event have announced the move to a virtual conference to be held online from December 4-13, 2020.

"This has not been an easy decision, but we came to a common consensus that it was necessary in this current climate. The safety and well-being of all our participants remains our top priority. We appreciate your understanding and patience as we adjust our plans and refocus our efforts to put together the very first SIGGRAPH Asia virtual event for the community," shared Jinny HyeJin Choo, SIGGRAPH Asia 2020 Conference Chair.

The theme for this year's SIGGRAPH Asia 'Driving Diversity' will take on a new meaning as we give our diverse group of worldwide technical and artistic contributors the opportunity to connect with and inspire new communities. The conference chair, Jinny Choo, and her team of program chairs are committed to delivering a strong SIGGRAPH Asia 2020 that celebrates this year's innovation, advances and achievements in computer graphics, interactive techniques and beyond. We are also optimistic that the virtual format will allow our global community to come together and participate in new and innovative ways and drive forward the forefront of our field.

Visit <https://sa2020.siggraph.org/en/>

AJA Gives KONA and Io Users Access to Adobe HLG HDR Features

AJA HAS ANNOUNCED THAT KONA and Io customers can now easily access the new HLG HDR features in the latest version of Adobe Premiere Pro, enabling them to edit and deliver HDR content. KONA and Io customers using AJA KONA 5, KONA 4, KONA IP, Io 4K Plus, Io 4K or Io IP with the AJA Control Panel interface and AJA Control Room software, including the latest soon to be released – version 16 – can simply open the AJA Control Panel, click the HDR tab and turn on HLG to ensure a seamless monitoring experience when editing and colouring HDR content.

AJA KONA PCIe cards enable powerful desktop I/O for a range of creative tasks from editorial to colour, mastering, HDR, dailies, live streaming, graphics, game capture and much more, including for content from 4K to 8K, multichannel HD, streaming and broadcast IP.

AJA Thunderbolt enabled Io products provide the same powerful desktop-level functionality in a portable form for professional editorial, graphics, VFX, streaming and colour work on laptop computers on set and in the field.

Visit www.aja.com



New Company LWKS Takes on Lightworks NLE and QScan AQC from EditShare

NEWLY LAUNCHED LWKS Software Ltd has announced the acquisition of the Lightworks NLE and QScan AQC system from EditShare.

The new company is being led by Chairman, James Richings, previously the joint managing director of EditShare EMEA; and CEO, Peter Lambert, previously EditShare's Asia VP of Sales and a former Country Manager with Avid.

Key members of the Lightworks and QScan software development teams are also joining LWKS, ensuring continuity of development efforts.

Lightworks has an installed base of over 1 million users and a rich heritage of work, including 'LA Confidential', 'Pulp Fiction', and 'The King's Speech'; it has been used in many high-profile television and film projects. Lightworks was used on projects which lead to Oscar wins for Best Editing including 'The Departed', 'The Aviator' and, most recently, it was used on Academy Award nominee Netflix's 'The Irishman'. Featuring a simple and intuitive UI, easy timeline editing and trimming, and real-time audio and video FX, it is an increasingly popular choice for a new generation of content creators on platforms such as YouTube and Twitch.

The QScan AQC software is used by high-profile



LWKS CEO Peter Lambert.

media companies such as NHK, Apple and Netflix, as well as leading post production houses, broadcast facilities, OTT operators, media management companies, and anyone involved in the media content creation and distribution workflow to ensure that content meets the appropriate technical standard.

"This is excellent news for both Lightworks and QScan customers," comments LWKS CEO, Peter Lambert. "It ensures both products will continue to be

developed with the care and attention to detail that they deserve. Lightworks and QScan are multi award-winning products used by millions of content creators and hundreds of media services providers worldwide. We are looking forward to integrating exciting new features and toolsets for them in upcoming releases and developing workflows that fuel creativity."

Long-time film editor for Martin Scorsese, Thelma Schoonmaker, also commented, "It is great news that Lightworks is becoming independent and dedicated to editors again and we look forward to continuing to support Lightworks and its future."

According to Conrad Clemson, CEO, EditShare,

"This transaction allows us to sharpen our focus on our storage and media management solutions while maintaining a commitment to openness in support of many technology and vendor touch points across the content supply chain. It also allows us to focus on virtualising and innovating this connected media ecosystem in the cloud, which is critical for our customers in today's climate.

"We are pleased to execute this transaction with Lwks Software. Their focus on the NLE market aligns very nicely with the assets they are purchasing from EditShare."

New releases for both products are currently slated for November, with further announcements to be made regarding the future roadmap as development ramps up.

The terms of the acquisition were undisclosed.

Visit www.lwks.com

"It is great news that Lightworks is becoming independent and dedicated to editors again and we look forward to continuing to support Lightworks and its future."

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PRISM Waveform Monitor Streamlines UHD and 4K/8K Post

TELESTREAM HAS ANNOUNCED the latest software for its PRISM Waveform Monitor. Built for post-production, live production and engineering, the latest release supports enhanced test tools for UHD and 4K/8K with RGB 4:4:4 12-bit HDR/WCG and False colour tools as well as the latest immersive audio surround formats.

Experienced post production staff can often subjectively gauge video quality on a regular monitor for HD/SD content, but this is very difficult to do with UHD/HDR standards. Editors and colourists need to know how much of the image is in the HDR zone and where their lightest highlights are, and their darkest shadows are. They also need tools to tell them that the colour in the mastered content is correct and error free. A new UI provides a hot bar which can be

customised to include the key applications needed for the application the PRISM is being used for, be it Live or Post Production, Engineering or Technical QC. Further flexibility is provided through the use of up to 36 different pre-sets which can be used to instantly reconfigure the PRISM and the hot bar layout for different applications. Those Pre-sets can be exported and remotely downloaded on to multiple PRISMs to ensure the whole team is working in a consistent fashion and with the instrument configured for their particular workflows. Not only can the pre-sets be exported and installed remotely, but PRISM itself can be accessed and controlled remotely through a web UI.



Other features in this release include the use of four active trace tiles, capture and decoding of SCTE 104 messages and the ability to select and down mix stereo and 5.1 surround audio channels.

Visit www.telestream.net

Grass Valley's Next-Gen EDIUS X Editing Software

GRASS VALLEY HAS ANNOUNCED the launch of EDIUS X which it says marks the start into a new era of nonlinear editing. The next generation of the multiformat software comes with a completely redesigned core engine along with a modular concept allowing even more performance for fully customisable workflows.

Katsushi Takeuchi, Grass Valley's vice president of editing systems, said: "The demand for captivating, stunning quality content is at an all-time high; it is therefore imperative for broadcasters, content owners and production companies to have tools that are reliable, fast and flexible. Building on the industry proliferation of cloud technologies and software-based workflows, the launch of EDIUS X ensures that we continue to provide our customers with the most enhanced capabilities and functionalities."

EDIUS X features background rendering and background export making the workflow a smooth, uninterrupted experience. The enhanced Layouter motion tracking allows the user to easily attach a label, animation, or video clip to a tracked object, and when combined with Anchor Mode reframes a shot with reference to the tracked object.

EDIUS X also supports the newest codecs and camera releases natively. The software includes enhanced GPU acceleration. This includes an ultrafast H.265 export which is also available with the new background rendering options. A new modular design allows utilising the potential of multi core CPUs more efficient than ever before.

EDIUS X comes bundled with three new modules for optimising audio, title creation and video effects including all new seamless transitions.

Visit www.edius.net/x

Maxon Announces Cinema 4D R23

MAXON HAS ANNOUNCED the availability of Cinema 4D Release 23 (R23). The next generation of Maxon's professional 3D software delivers enhancements to its animation and UV workflows, character animation toolset, and the inclusion of Magic Bullet Looks technology. The introduction of the new Scene Nodes system provides a preview of the performance customers can expect in future developments of Cinema 4D. Plugin developers will appreciate the update to Python 3, and creative pipelines will benefit from the inclusion of USD import/export and updates to FBX and OBJ handling. R23 will be available on September 9th for subscription holders and will be available as an upgrade for perpetual license holders.

R23 Feature Highlights:

- **New Character Animation Tools:** Includes new Character Solver and Delta Mush workflows as well as a new Pose Manager and Toon/Face Rigs.
- **Animation Workflow:** Better Keyframing, Filters for the Timeline and Attributes Manager, and more.
- **UV Workflows:** All the powerful UV editing capabilities introduced in Cinema 4D S22 (the subscription-only upgrade) plus new tools geared toward UV workflows for hard-surface models.
- **Magic Bullet Looks Integration:** Easily apply one of over 200 preset film looks, import LUTs, or work with individual tools for color correction, film grain, chromatic aberration and much more.
- **Scene Nodes:** Scene Nodes allows users to explore massive Distributions and Procedural Modeling in advance of the further Cinema 4D core engine development for optimal creativity and experimentation.

Visit <http://www.maxon.net/en/>

Red Giant Universe 3.3 Adds Light Trails, Powerful Blends

RED GIANT HAS RELEASED an update to Universe, its collection of GPU-accelerated plugins for editors and motion graphics artists. Universe 3.3 delivers two brand new tools and an update to four current ones in the existing Universe suite. Visual artists will have access to an even greater selection of dynamic tools for motion graphics with the introduction of Quantum and Modes and as well as the updated versions of the Glow, Glimmer, Chromatic Aberration and Hacker Text tools.

Two Brand New Tools in Red Giant Universe 3.3 include

- **Quantum:** This tool creates the illusion of an animated light trail in front of or behind a layer;
 - **Modes:** Modes makes it easy to combine layers in entirely new ways using powerful features that go beyond the native blend modes found on an editing timeline.
- Universe 3.3 includes a total of over 100 new presets for the new and updated tools, including:
- **Glow:** Universe Glow now offers inverse-square glow falloff, multi-pass chromatic aberration and the ability to glow a single colour channel.
 - **Glimmer:** This update gives users six mono or bi-directional glow streaks with variable intensity and colour mapping, an animatable shimmer, variable rotation control, and colour maps aligned with Trapcode's Starglow.
 - **Chromatic Aberration:** This tool now includes control over the focus area, the ability to split the aberration into multiple passes, and chromatic rotation.
 - **Hacker Text:** The popular computer text tool now features customizable random characters and the ability to auto-animate the encryption and decryption.

Visit <http://redgiant.com/universe>



Intel oneAPI Rendering Toolkit

THE RECENT VIRTUAL SIGGRAPH 2020 saw Intel announce the latest additions to the Intel oneAPI Rendering Toolkit. Part of Intel's oneAPI family of products, the toolkit brings premier high-performance, high-fidelity capabilities to the graphics and rendering industry. The toolkit is designed to accelerate workloads with large data sets and high complexity that require built-in artificial intelligence (AI) through a set of open-source rendering and ray-tracing libraries to create high-performance, high-fidelity visual experiences. The new additions are Intel OSPRay Studio and OSPRay for Hydra available later in 2020, and visualisation capabilities for the oneAPI Intel DevCloud with sign-up available now on the Intel Developer Zone website.

By taking advantage of Intel's XPU hardware, Intel Optane persistent memory, networking solutions and oneAPI software solutions, content creators and developers can bring their ideas to photorealistic reality with performance, efficiency and flexibility across today's and future generations of systems and accelerators.

Intel OSPRay Studio is a scene graph application that demonstrates high-fidelity, ray-traced, interactive, real-time rendering, and provides

capabilities to visualize multiple formats of 3D models and time series. It is used for robust scientific visualization and photoreal rendering and consists of Intel OSPRay in conjunction with other Intel rendering libraries (Intel Embree, Intel Open Image Denoise, etc.).

Intel OSPRay for Hydra is a Universal Scene Description (USD) Hydra API-compliant renderer that provides high-fidelity, scalable ray tracing performance and real-time rendering with a viewport-focused interface for film animation and 3D CAD/CAM modeling.

New Intel DevCloud for oneAPI capabilities enable the ability to visualise and iterate rendering and create applications with real-time interactivity via remote desktop. Users can use the Intel oneAPI Rendering Toolkit to optimize visualization performance and evaluate workloads across a variety of the latest Intel hardware (CPU, GPU, FPGA). There is free access with no installation, setup or configuration required.

Advantages of using Intel's platform with an open-development environment for ray tracing and rendering for developers include:

- Open-platform approach addresses single-vendor, lock-in customer concerns with cross-architecture support for a variety of platform choices in performance and costs.
- Rendering toolkit open-source libraries drive innovation through powerful ray-tracing and rendering features that extend beyond the capabilities of GPUs, such as model complexity beyond triangles, path tracing, combined volume and geometry rendering, and addressing the data explosion in today's workloads.
- Simplified AI integration is included via Intel Open Image Denoise, Intel® Distribution of OpenVINO toolkit and acceleration via 3rd Gen Intel Xeon Scalable processors with Intel Deep Learning Boost and bfloat16.
- Intel tools provide readiness for next-generation hardware innovations to ensure visualisation applications automatically scale to support future Intel CPUs, GPUs and other accelerators.

Visit <https://devmesh.intel.com/groups/2969>

OTOY NVIDIA A100 GPU Nodes on Google Cloud for RNDR

OTOY HAS LAUNCHED the RNDR Enterprise Tier featuring next generation NVIDIA A100 Tensor Core GPUs on Google Cloud with performance it says surpasses 8000 OctaneBench. This milestone was reached on a Google Cloud Accelerator-Optimized VM (A2) instance with 16 NVIDIA A100 GPUs. Each A100 GPU offers up to 20x the compute performance compared to the previous generation processor.

With Google Cloud's NVIDIA A100 instances on OTOY's RNDR Enterprise Tier, artists can leverage OctaneRender's industry-leading, unbiased, spectrally correct, GPU-accelerated rendering for advanced visual effects, ultra-high resolution rendering, and immersive location-based entertainment formats. Benchmarked using OctaneRender 2020.1.4, Google Cloud instances bring thousands of secure, production-ready NVIDIA high-performance GPU clusters to the OctaneRender ecosystem – featuring both NVIDIA V100 Tensor Core GPUs (with up to 3000 OctaneBench) and NVIDIA A100 Tensor Core GPUs (with up to 8000 OctaneBench).

In 3Q 2020, OctaneRender users will get early access to Google Cloud's new NVIDIA A100 GPU instances with 40GB VRAM, 8-way NVIDIA NVLink support and 1.6 TB/s memory bandwidth, delivering remarkable memory capacity for blazing-fast GPU render times for the most demanding memory-intensive scenes – which was previously only available with slower out-of-core or CPU rendering.

According to OTOY Founder and CEO Jules Urbach, "For nearly a decade we have been pushing the boundary of GPU rendering and

cloud computing to get to the point where there are no longer constraints on artistic creativity. With Google Cloud's NVIDIA A100 instances featuring massive VRAM and the highest OctaneBench ever recorded, we have reached a first for GPU rendering – where artists no longer have to worry about scene complexity when realizing their creative visions."

Urbach added, "OctaneRender GPU-accelerated rendering democratized visual effects enabling anyone with an NVIDIA GPU to create high-end visual effects on par with a Hollywood studio. Google Cloud's NVIDIA A100 instances are a major step in further democratizing advanced visual effects, giving any OctaneRender users on-demand access to state of the art NVIDIA GPUs previously only available in the biggest Hollywood studios."

"Built on the NVIDIA Ampere architecture, the NVIDIA A100 Tensor Core GPU has come to the cloud faster than any NVIDIA GPU in history," says Bob Pette, vice president of professional visualization at NVIDIA. "Its record-breaking performance will open creative possibilities for artists and designers who use OctaneRender to produce their leading-edge work."

"Google Cloud Accelerator-Optimized VM (A2) instances are one of the only places with 16 GPUs connected via NVLink topology, enabling artists to push creative boundaries without sacrificing speed or performance. Bringing A2 instances to RNDR is a game changer for ultra-high resolution production, machine learning augmented rendering workflows, and next generation immersive media formats," said Manish Sainani, Director, Product Management,

ML Infrastructure, Google Cloud.

Introduced earlier this year along with OctaneRender 2020, the RNDR Network allows artists to choose between rendering jobs on secure Enterprise Tier GPUs like Google Cloud's NVIDIA instances or leverage the massive processing power available on a network of decentralized GPUs. Artists processing renders on the RNDR Enterprise tier can also use decentralized GPUs for overflow capacity, providing the flexibility to scale renders across thousands of peer-to-peer nodes when on a deadline or for ultra-high resolution formats.

The RNDR Enterprise tier on Google Cloud is available for users of all OctaneRender integrated plugins across 20 of the industry's leading content creation tools – including Maxon Cinema 4D, SideFX Houdini and Autodesk Maya. All current OctaneRender 2020 Studio and Enterprise subscribers as well as for OctaneRender Box License holders with an Enterprise maintenance plan are able to access the RNDR Enterprise Tier.

Current OctaneRender users can try RNDR today at <https://rndr.otoy.com> or subscribe, buy, or upgrade to OctaneRender 2020 to access industry-leading 2-3x NVIDIA OptiX7 RTX GPU hardware acceleration, Fast-Spectral Random Walk SSS, C4D native GPU noises, OSL Volume Shaders, and many more new features. OctaneRender 2020 also includes access to EmberGenFX – one of the industry's first real time GPU simulation toolsets for ultra-realistic fire, volumetrics, smoke and particles and OTOY Sculptron, a GPU-based Mesh sculpting toolset.

Visit www.otoy.com



VSN and the MAMifications of Workflow

THERE SHOULD BE SOME CAUSES for celebrating in 2020 and VSN is celebrating 30 years of being in business. Launched as an automation company, it has developed a range of systems and solutions for various markets with a core competency around media asset management and automation.

With points of presence throughout the region, Nick Morgan, VSN's Asia-Pacific Manager, says the company is well positioned to solve some of 2020's industry challenges.

"Obviously, the big trend at the moment is around remote workflow," he says. "This has been going on for quite some time. In fact, VSN has been focused on the remote part of the workflow for actually such a long time. And we developed our current media asset management platform around I think 2011. We've been building that ever since. But, the primary drivers of that was access anywhere, content anywhere. That was one of the key philosophies in the design of the system. We built it all on HTML 5. It's all completely web-based. There are no applications to install anywhere."

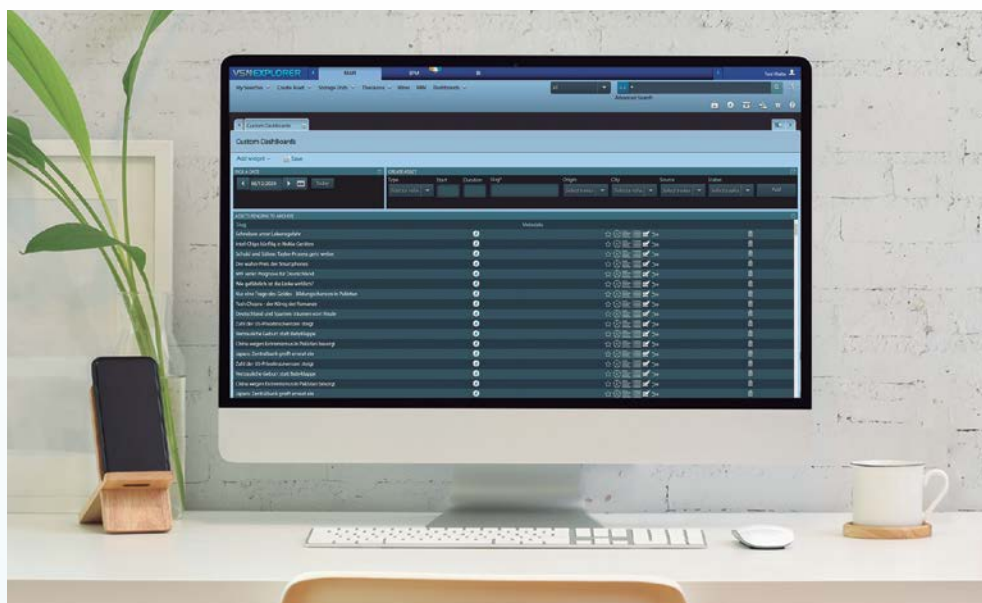
And VSNE Explorer is the MAM platform?

"Absolutely. And we have several components or modules to VSNE Explorer. We have the core MAM itself. We also have a very powerful PAM module integrated within the same system, using the same database. We can actually track contents that are based on an NLE sequence. We have that tight integration with NLE systems. We know and are aware of every single clip and every frame boundary within a sequence. It allows us to save and store those sequences as you would in other typical PAM systems. And also allows us to do things like storage management based on what's on the sequence, or what you want to protect in somebody else's NLE editing sequence.

"Recently, we introduced a production planning and stage tracking module. Now you can pre-determine who gets involved from a functional user perspective - the various competencies you have like NLE editing, video editing, audio editing, graphics generation, or any other production type - and you can establish who does what and when. We actually track the production through the various stages. When people have actually finished their particular job they can say, well that's done, automatically flag the next person in the production chain to pick up that project, and then do their particular part on it; or they can run simultaneously. But, we set these up as automated workflows with checkpoints that flag various users, and even manages where a production is in a particular stage.

"The third module we have is our BPM. Most people would know that as a workflow orchestration system. We have a very powerful visual workflow orchestration system that allows users to basically connect the dots, like boxes if you've ever built a Visio diagram or something like that, each box contains an event or a piece of script that determines a particular action or process that happens either within the MAM itself, or through a third-party system. When you can actually drag and drop and connect all of these, and you can have parallel processes running simultaneously and all merging to a final end point.

"There's no real limitation on how you architect a workflow in our BPM solution. And we give this great toolset which allows users to actually create and design their own workflows. This system not only works with our own MAM, or even a manual task, so it can break out to allow a review and



"There's no real limitation on how you architect a workflow in our BPM solution. And we give this great toolset which allows users to actually create and design their own workflows."

approval stage, or some human intervention task, but we also allow it to connect with third party systems like transcoding farms or what have you. That can actually perform a task that the BPM has set outside of the MAM and maybe bring it back.

"The last module of the MAM is our Business Intelligence Module, which is designed ultimately to gather up data of activity and operations that happen within the MAM. An example would be number of users that have picked up a particular asset and created a production from it. The number of times a particular program might have been transcoded into different formats. The number of users that have actually been involved in creating a production. The time it took them to create that production. Whatever the metric happens to be we can gather up all of those metrics and we can then generate logical reports in a visual fashion. Your typical bar charts, pie charts, this sort of thing, so you can actually see how things break down. We can break the data down and present it to you in a visual way.

"The other side of that is we go another step further there, we actually can integrate with third party systems as well and gather up their information if they allow us an API to gather up their data. And the common trend we're seeing around BI is customers asking us, can you get OTT data from various VOD platforms, or OTT platforms, or even social platforms. The various kind of user metrics that we're seeing in the digital world are now coming back into a MAM environment. The MAM not only becomes a central production hub for the production of content, it's now being used to collate data from those different end publishing points back into that world to allow management teams, decision makers to be able to review that data and make logical business decisions based on the data they're seeing."

So, what are your observations on the evolution of remote workflows during this pandemic?

"I guess the thing is that - and I don't think it's just VSN - but I think quite a few vendors have had the capability of doing or offering remote workflows as part of a core functionality of their solution, however the pandemic has triggered a very serious look at that. The media industry is starting to recognise that remote workflows are possible. They don't impact productivity. They allow people potentially to be a lot more creative in their own environment. They're not restricted by an environmental space. And they're seeing some pretty impressive results.

"From a technology standpoint that will only increase. I mean if you're not fully into remote workflows now you certainly are rushed into facilitate that. Because I think it's definitely going to be a huge part of our future."

Visit <https://www.vsn-tv.com/en/>



DejaEdit 3.2 with Azure Support

DEJASOFT HAS FURTHER EXPANDED its Avid remote file sharing software, DejaEdit in version 3.2 to support Microsoft Azure secure storage. Another major highlight includes the safeguarding of project files with robust prior encryption before they are directed to an assigned media server chosen by the user.

Compatible with Avid Media Composer and Avid Nexis systems, DejaEdit enables multiple remote Avid editing and storage systems to synchronise files and bins with each other, securely across the internet, ensuring that editors and other contributors can collaborate using shared assets, irrespective of where they are located.

DejaSoft also provides users with multiple options for media server configurations that range from a simple turnkey approach, to using existing cloud storage accounts, or retaining the media files "in-house". For customers looking for a turnkey set-up, DejaSoft provides its own "ready-to-go" cloud storage for the media server.

Storage provided by Amazon Web Services, Wasabi and Backblaze are all already supported in DejaEdit.

Alternatively, customers who would like to keep their media files "in-house" can configure their own media server using open source object storage software MinIO.

DejaEdit version 3.2 now allows customers to store media files to their Microsoft Azure Blob Storage account.

CTO at DejaSoft Nikolai Waldman notes, "Security of editing data is of primary importance to us. DejaEdit 3.2 now encrypts media files transparently for each project with a unique 256-bit key before they are sent to the media server. They are then decrypted after being downloaded to the client. This ensures that data saved on the media server (or if intercepted in transit) is unintelligible to unauthorised people."

Visit <https://dejasoft.com/dejaedit>

Remote Media Workflow Bundle

AXLE AI HAS ANNOUNCED the Remote Leap bundle, a complete solution for remote media access. The solution is comprised of axle ai's video search software and Apple computing hardware.

The Remote Leap solution includes a five-user version of axle ai 2020, the company's remote access and search software. axle ai 2020 features a browser front end that lets users remotely access and tag, catalogue and search their media files, and the bundle adds 500 hours per year of integrated AI-driven transcription, for a total of 2000 hours over a 4 year lease period,

as well as axle's Reverse Proxy remote access option for a secure way for media teams to work from home and on-set while accessing large amounts of shared media. Axle ai's plug-in panels for the Adobe Creative Cloud suite – Premiere Pro CC, AfterEffects CC, Photoshop CC, Illustrator CC and InDesign CC – are included, as well as an export capability for Apple's Final Cut Pro X software.

The software functionality is bundled with Apple's newest iMac 27" 5k i9 hardware, a high-performance all-in-one desktop computer configured with 10 cores and 20 threads of Intel

i9 processing capability, a Radeon 5000 series GPU, 16 Gigabytes of RAM, a 10 Gigabit network interface and 512GB of system SSD, as well as 8TB of external storage to house streaming H.264 proxy media.

The Remote Leap bundle can be connected to nearly any existing storage, whether on-premise (NAS or SAN), cloud based, or both. Modules are also available to integrate with most archival systems such as LTO tape libraries.

Visit <https://axle.ai>



Check out what's new and get in touch with us in our digital event, **VSN Wired!**

More than ever, you need to be **MEDIA** ready for any challenge. And now, you have the chance to learn how.



New control & operations panel in **VSN Explorer**



New workflows for remote news production in the **Stories Solution**



Non-linear programming & SaaS in **VSN Crea**

All of them available for you in our virtual event at:

vsn-tv.com/en/wired



Western Digital Unveils ArmorLock Encrypted NVMe SSD

WESTERN DIGITAL HAS INTRODUCED the ArmorLock Security Platform, a data encryption platform created to help with the diverse security demands of data-centric and content-critical storage use cases.

Western Digital plans to apply the platform across a range of storage solutions. The first product to leverage this advanced technology, the new G-Technology ArmorLock encrypted NVMe SSD, is designed to deliver an easy-to-use, high-performance, high-grade security storage solution for creators in the media and entertainment industry. Facing the threat of hijacked media files and leaked films, studios, agencies, and especially investors are demanding a better way to protect critical content. While much of the industry's focus has been on cloud security, data often remains vulnerable on the portable storage devices holding critical commercial content.

Unlike password-based encryption technologies that interrupt workflows and prevent fast availability to digital assets, the ArmorLock Security Platform delivers unmatched security that allows the content owner to control how data is accessed and by whom. The ArmorLock encrypted NVMe SSD delivers this technology with simplicity, reliability and speed while protecting mission-critical content.

A comprehensive set of technologies covers the ArmorLock product lifecycle from manufacturing to out-of-the-box setup, in-field updates, and configuration and key management that ties directly into hardware-backed modules and biometric protection on some of the latest smartphone and desktop platforms. Designed to help improve how people manage critical data, the ArmorLock platform eliminates the trade-off between fast access to data and privacy by delivering both at the same time.

Building on its legacy of contributions to open source with RISC-V and OpenTitan, Western Digital has also announced the open source release of Sweet B, the high-performance core cryptography library that underlies the ArmorLock Security Platform. Sweet B is designed to provide a new level of safety and assurance in open

source elliptic curve cryptography and its GitHub repository includes documentation, a comprehensive test suite, and an independent third-party audit by the security research firm Trail of Bits.

Key features of the ArmorLock Security Platform include:

- Manufacturing technologies that provision each device with a root of trust and digital certificate of product authenticity
- Simple and robust firmware updates delivered straight from the ArmorLock app
- Open source, third party audited core cryptography with side-channel attack mitigation
- Sandboxed smartphone and desktop applications delivered through platform-native app stores – no special installer required
- Communications over wireless and wired connections with zero-touch certificate-based provisioning
- Password-less authentication and key exchange technologies that directly link storage encryption to hardware-backed biometric authentication
- Zero-knowledge public key management that helps protect your privacy even if the ArmorLock device is lost or stolen

The ArmorLock encrypted NVMe SSD – delivering up to 1000MB/s read and write speeds via a SuperSpeed USB 10Gbps port – combines both ease-of-use and next-generation “zero knowledge” security. With the ArmorLock app, users can unlock the device wirelessly with their phone, using face recognition, a fingerprint, or the phone's passcode ensuring lost passwords don't cause missed deadlines. The SSD provides encryption without getting in the way of the workflow by enabling collaboration without the need to tape PINs to the drive.

The ArmorLock mobile and desktop apps also provide fleet managers the ability to configure



and manage multiple drives and multiple users to control who has access. Especially important for collaborative workflows that require safe shipping of content between physical locations, the next-gen security in ArmorLock devices enables teams to authorize remote users before sharing the drives using popular messaging and email services.

Other key features of the ArmorLock encrypted NVMe SSD and ArmorLock app include:

- Simple to setup and easy unlock with your smartphone via the ArmorLock app
- High-grade 256-bit AES-XTS hardware encryption
- Secure erase and reformat to your favorite file system in one step
- Track the last known location of the drive on a map
- In-field updates for continued security support, improvements, and new features
- Ultra-rugged durability with IP67 dust/water resistance, up to 3M drop protection* and 1000lb crush resistance

The ArmorLock app for iOS and macOS is available for free download: <https://GetArmorLock.com/Apps>

Visit <https://bit.ly/36yPSIH>

Tedial Unveils New Version of Capture Manager

TEDIAL, THE INDEPENDENT MAM technology solutions specialist, has announced a new version of its Capture Manager scheduling UI. As a result of the COVID-19 pandemic, global media companies have turned to remote production tools that enable operators to control ingest anytime, from anywhere. Tedial's Evolution MAM will now include a new version of its web-based HTML5 Capture Manager, which provides an agnostic central interface for controlling and monitoring devices as well as advanced, ingest features.

The latest version of Tedial's Capture Manager includes two tools; the first is for the ingest list. This creates ingest placeholders before an event is recorded. It allows the production team to be more efficient by creating the scheduling information using the metadata in advance of the event, before the team knows which router will record the event. When the router input has

been defined, the system automatically allocates the physical ingest channel. This highly efficient workflow reduces the time spent managing the ingest process and gives greater visibility to what's coming next.

The second tool, orchestrates scheduling using a timeline view, per ingest channel and provides dynamic allocation of ingest channels. It's agnostic to third-parties and more importantly, to video servers. Servers from different manufacturers can be managed together from the same tool, at the same time allowing customers to leverage their investments. It also enables connection to traffic systems like Provys or Mediagenix. Thanks to Tedial's API, operators can manage an end-to-end ingest workflow. Programme scheduling is created in the traffic system, which allocates a placeholder on the ingest list. Tedial's Capture Manager tools then automatically control the router and

dynamically switch the input at the time of the recording. The combination of the ingest list and ingest scheduling features provides increased production efficiency.

Further key features are integration and interoperability. Tedial Capture Manager seamlessly integrates with most of the videosevers and routers in the market, and in combination with the rest of the Tedial tools can also integrate with external scheduling/traffic systems.

Emilio L. Zapata, CEO, Tedial says, “The COVID-19 pandemic has accelerated the move to remote working across the world. It's our aim to ensure that broadcasters and content owners have efficient automated, end-to-end workflows that provide a centralised UI for controlling and monitoring devices, significantly improving ingest time management and scheduling visibility.”

Visit <https://www.tedial.com>



AFT Unveils AJA Pak Media Reader

AITECH FLASH TECHNOLOGY (AFT), a manufacturer of industrial and professional media card readers and storage solutions, has announced the Blackjet VX-1P AJA Pak Media Reader, a new media reader compatible with AJA's durable, high capacity Pak Media. Encased in a protective metal housing, AJA Pak Media Solid State Drives (SSDs) offer video professionals flexible storage options with capacities ranging from 256GB to 2TB and are built to withstand repeated use in the field.

Blackjet VX-1P utilizes the bandwidth of USB 3.1 Gen 2 (10Gbps), allowing users to ingest, edit and archive creative content from AJA Pak Media at maximum speeds. The new VX-1P utilizes the USB-C interface, making it compatible with existing Mac and Windows USB 3.1 and Thunderbolt 3 computers.

Key VX-1P features include:

- AJA Video Systems certification
- USB 3.1 Gen 2 for transfer speeds up to 10Gbps
- Reversible USB Type-C connector for quick and easy connection
- Ingest speeds of up to 525 MB/s
- Rugged metal enclosure for durability and longevity
- Vent holes to increase heat dissipation
- Thunderbolt 3 compatibility

Visit www.blackjetusa.com/product-vx1p and www.aja.com/products/pak

Cantemo Portal 4.3 Delivers More Control

CANTEMO HAS ANNOUNCED an update to its media asset management system, Cantemo Portal. Portal 4.3 launches new features aimed at giving users more control over their media, while saving time and resources.

The audio player within Portal has had a redesign to deliver both more detail and add functionality including better playback control. Using JKL keys, users can choose various playback speeds. The audio signature is now included as part of the display, making it easy to see what is happening with the audio at a glance.

Portal 4.3 also delivers an update to the Portal Final Cut Pro Workflow Extension. Users are already able to continue working in Final Cut Pro, while Portal keeps the content organised in the background. With this update, editors have more ways to find the assets they need with new Portal collections and saved searches within the workflow extension.

Cantemo has introduced updates to its collections, making it much simpler and quicker to create and search by collections. Users can create a collection with metadata, with every asset within that collection inheriting that metadata.

Parham Azimi, CEO, Cantemo, commented: "We are continually updating Cantemo Portal to ensure that our users can be as efficient as possible. These updates will help them further reduce manual effort and save valuable time."

The latest version of Portal also features a new tasks page to give an easy overview of open tasks, as well as a Database Monitor Page. Admins can monitor and purge databases as well as see database changes over time. Admins can also time and configure purge intervals and purge directories. Third-party integrations can add more efficiency to the Portal workflow. The Rest API reference page now offers more ways to set up creative integrations. This collection of APIs makes it easy to find what you need when preparing your own solutions.

Visit <https://www.cantemo.com>

Hitachi Vantara Reaches New Speeds for Unstructured Data

HITACHI VANTARA, the digital infrastructure and solutions subsidiary of Hitachi, Ltd. (TSE: 6501), has announced a new distributed file system and management solution that will help customers gain faster access to and insights from unstructured data such as emails, documents, health records, audio, video and images.

The new solution will be delivered through a partnership with WekaIO (Weka), the developer of scalable file storage for data-intensive applications.

Hitachi Vantara has also announced an expansion of the Hitachi Content Platform (HCP), its cloud object storage software solution for connecting data producers, users, applications and devices.

The new OEM relationship with Weka will

enhance Hitachi Vantara's portfolio with a high-performance, NVMe-native, parallel file system that the company will deliver tightly coupled to an HCP datastore. This performant network-attached storage (NAS) solution will be well suited for use with artificial intelligence, machine learning and analytics applications across a broad array of industries.

The expansion of HCP also better supports next-generation unstructured workloads with performance-optimised all-flash HCP nodes. These new capabilities will deliver almost 3.4 times more throughput over Amazon's Simple Storage Service (S3) protocol, resulting in lowered costs of up to 34%.

Updated storage nodes also deliver an

improvement of three times the read and write performance, while simultaneously enabling three times more capacity in the same rack space as the previous generation. This is especially significant as traditional NAS, primary workloads and cloud-native workloads are transitioning to object storage to meet high-performance requirements.

The new HCP expansion helps customers translate data into business insights faster, increase revenue from data generated by unstructured data, and improve application performance to drive a better digital experience for end users.

Visit www.hitachivantara.com

Silver Trak Expands MediaTrak Workflow Solution

IN ADDITION TO ACQUIRING new businesses in Australia and the Asia Pacific region and launching new offices in Malaysia and New Zealand, Silver Trak Digital has also been busy expanding its MediaTrak workflow management solution.

MediaTrak is a cloud-based web interface that updates in real-time. As a media technician or supplier updates a status against a service, the client can see its progress. It collects a range of information for Silver Trak and turns it into a day to day manager for staff and equipment resources, client portal for complete visibility as well as a database of IP for the services that Silver Trak has to offer. Users can now place an order

for any number of services, track the order's progress and watch it successfully be delivered to a variety of broadcast and distribution outputs all via this effective and efficient tool.

MediaTrak works in parallel to Silver Trak's Media Room, an advanced asset management solution available as a SaaS platform, to ensure every piece of content including film, TV and music masters, trailers, graphics, photos, metadata, captioning, subtitles and audio streams are digitally archived in one place keeping tracking and access simple and secure.

According to Silver Trak Digital Cinema Manager Kylie Longworth, "MediaTrak gives users immediate access to a full-service, production

facility. From complex UHD, Blu-ray and DVD design and authoring, QC to transfers, conversions, edits and broadcast delivery all under one roof. With all of our platforms we ensure our clients get complete transparency, what they want when they want it and great service from an expert team. MediaTrak has an easy-to-use web-interface that makes ordering and delivering content a breeze, saving time and eliminating margin for error. Then, by storing content in Media Room, users have completely futureproofed their content solution for their library."

Visit www.silvertrak.com.au



PA People Brings Dante Audio to NRL and Soccer

JUBILEE STADIUM is the premium sporting venue in Sydney's Georges River Local Government Area, with capacity for 20,000 patrons. This year, the ground has been home to three major clubs including NRL teams the St George Illawarra Dragons and Cronulla Sharks, and the A-League's Sydney FC.

Since February 2017, the Georges River Council has since embarked on a series of improvements, including the installation of a new Video scoreboard. Taking advantage of the break in sporting activity due to the Corona virus pandemic, Council put out a call for the design and installation of a new sound system to cover the grandstand and terraces on the Western side of venue.

The P.A. People had presented a number of proposals to previous management teams to upgrade the sound system at the Venue over many years, and as the incumbent supplier and sponsor of Sydney FC for the past two seasons, was keen to respond.

Council required a comprehensive solution to achieve a number of outcomes: improved audio coverage of the grandstand area, a better experience for patrons and corporate attendees, additional flexibility and ease of use for a range of hirers.

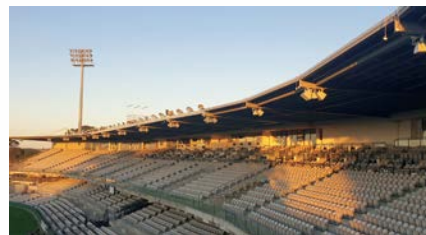
"The geometry of the venue provided quite a few

challenges – the roof is very low so we could not use a few larger cabinets," commented Brett Steele, Manager of the Installed Systems team at The P.A. People. "JBL AWC series speakers were selected for the stand based on their throw-distance and dispersion. Linea Research C88 series amplifiers were paired to the speakers, along with a QSC Qsys Core 110f, Shure mics & a Yamaha TF5 Mixer."

The system uses a Dante audio network to integrate the side of field patchable inputs, the DSP and the amplification along with the mixer, which is located in the Production Suite on the other side of the Venue. The use of a Dante solution also provided the capability to augment the new system's additional equipment for extended coverage of the rest of the ground.

The new system is also able to be controlled in a simple stand-alone mode (without the Mixer) through a series of wired and wireless Android touch panels connected to the Q-SYS system, which provide access for Basic & Professional modes depending on user/hirer requirements and their experience level.

Luke Coleman, Manager of Premium Facilities for Georges River Council said, "The P.A. People have delivered an excellent sound system solution for Georges River Council in the western grandstand



at Netstrata Jubilee Stadium. The capability of the system, apart from producing a quality sound, has the ability to interface with the augmented system for the whole stadium, as well as operate independently through wireless control, and the simplicity of that control to enable venue staff to operate as required."

Equipment used in the installation includes: JBL AWC159 15" Speakers (Terrace); JBL AWC129GY 12" and JBL AWC82GY 8" Speakers (Upper Tier); JBL AWC62GY 6.5" Speaker (Under Balcony); Linea Research 88C10-DANTE and 88C06-DANTE DSP Power Amplifiers; Ruckus Wireless Zoneflex WAP; Ruckus Network ICX7150 series Switches; QSC Qsys Core 110f DSP + Dante Software; Yamaha TF1 Mixer and NY64-D Dante Card; Yamaha T101608-D Stage-Rack; Shure QLXD24S58 Wireless Handheld Mic Systems; RF Venue DFINB Diversity Antenna; and Philips 10" LED Touch Displays.

Visit www.papeople.com.au

WA Academy of Performing Arts Goes Wireless with Riedel

SITUATED ON THE Mount Lawley Campus of Edith Cowan University near Perth, the Western Australian Academy of Performing Arts (WAAPA) is recognised nationally and internationally for providing a comprehensive range of performing arts training. WAAPA recently migrated its production communications infrastructure to Riedel's Bolero wireless intercom system. Replacing an obsolete wired system, Bolero provides crystal-clear, efficient, and easy-to-manage communications for WAAPA performance crews at both on-campus and off-site venues.

With the previous hard-wired system for production communication between technical crew such as lighting, sound, stage managers, and mechanists, WAAPA was experiencing around 50 hours of downtime annually. The downtime, coupled with maintenance delays, was hampering the school's ability to stage modern productions; furthermore, students' learning hours were affected as staff triaged the breakdowns in communication. The previous communications setup was also supported by two discreet for-hire systems that racked up substantial annual equipment costs and additional fees for support.

In contrast, the new Bolero wireless system provides a streamlined and reliable communications infrastructure that works equally well for both on-campus and off-campus productions. The modular, integrated design allows for fast setup times and cost efficiencies, and the wireless operation removes the risk of cable entanglements with machinery such as fly-lines and large, moving trucks. Because the Bolero installation is designed around a facility-wide backbone, the system is already in place to enable on-the-fly communications between two venues as needed — without additional hardware and with only minimal configuration changes.

Visit www.riedel.net

AI-based Audio Enhancement Project

FORMER MPEG HEAD Leonardo Chiariglione has launched a new standards body, Moving Picture, Audio and Data Coding by Artificial Intelligence (MPAI). The group is planned to be a non-profit organisation and will develop technical specifications for data coding, especially using Artificial Intelligence, and their integration in Information and Communication Technology systems.

The MPAI has announced that one use case – Context-based Audio Enhancement (MPAI-CAE) – has reached sufficient maturity to warrant the start of the next stage where detailed functional requirements are identified.

MPAI-CAE addresses a variety of consumer-oriented use cases, e.g. entertainment, voice communication, audio conferencing, gaming etc. relevant to different contexts – e.g., at home, in the car and on the go – that may greatly influence the audio experience. MPAI-CAE also addresses professional applications such as audio (post-)production and restoration.

The MPAI-CAE standard will specify:

- Input and output interfaces for a set of contexts
- Interfaces of updatable and extensible processing modules, both traditional and AI-based, to create processing pipelines for possibly partly local and partly on-the-cloud execution
- Interfaces of the processed audio signals to a variety of delivery protocols.

MPAI envisages that technology providers will benefit from a wider usage of their technologies beyond their specific domains; application vendors adopting the emerging MPAI-CAE standard will be able to tap from the common set of technologies to support their specific needs; service providers will benefit from an accelerated delivery by being able to third parties' components from both a technical and licensing perspective; and end users will be able to tap from a competitive market providing constantly improved user experiences and AI-based audio endpoints.

Visit <https://bit.ly/33zWyUO> for more details on MPAI-CAE.



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DirectOut PRODIGY Evolves to Next Level

DIRECTOUT HAS EXPANDED the capabilities of its PRODIGY Series with the release of new firmware for both PRODIGY.MC (Modular Audio Converter) and PRODIGY.MP (Multifunction Audio Processor).

Originally planned solely for PRODIGY.MP, the update expands the potential application scenarios of PRODIGY.MC by adding FastSRC and EARS (Enhanced Automatic Redundancy Switching).

FastSRC is a bidirectional, low-latency asynchronous sample-rate converter for MADI and Network I/Os that allows two digital interfaces of a device to work in different clock domains. It combines good sound quality with very low latency of less than 0.15 milliseconds, and is invaluable in live sound applications and a "life-saver" in critical situations.

Other new functions include the Levelmeter speed configuration and an LTC-to-MTC converter.

Updated Control Software

A new version of the globcon control software is also available for free download, and is required in order to manage all of the new functions brought to the PRODIGY Series by the major firmware updates.

globcon is a global control software platform for the management of professional entertainment production equipment which allows standardised control of multiple types of equipment from different manufacturers.

DirectOut GmbH, was the first adopter of globcon and the complete DirectOut product portfolio is fully supported by globcon. In 2020, an increasing number of differing devices

from multiple manufacturers is being added progressively. A public version of the software is available for download at no cost, providing integrated control and management of any number of DirectOut devices via an Ethernet network, USB and MIDI ports.

According to Luca Giaroli, Product Manager at DirectOut and at globcon, "Thanks to the great co-operation between DirectOut and the globcon team, we have been able to increase the usability and versatility of the DSP functions inside PRODIGY.MP still further by adding parallel compression and stereo link to the dynamics, and introducing a new set of IIR EQs including All-Pass filters. The processor combined with its control software is absolutely ready to face any audio challenge."

Visit www.globcon.pro and www.directout.eu/en/support/updates

Shure SLX-D Digital Wireless System

THE SLX-D DIGITAL Wireless System is the newest addition to Shure's digital wireless portfolio. Replacing Shure's popular SLX system, SLX-D comes complete with new mechanical designs, exceptional audio quality, more reliable RF performance and simplified setup.

The multi-faceted SLX-D Digital Wireless System provides end users with greater channel count than SLX, smart rechargeable options, and single and dual channel options. Transmitters run on standard AA batteries or an optional lithium-ion rechargeable battery solution with a dual-docking charging station.

SLX-D is a state-of-the-art system with several notable features and user-friendly benefits, including:

- **Reliable RF** - The system enables operation of up to 32 channels per frequency band without worrying about dropouts or signal fades.
- **Excellent Audio Quality** - the SLX-D can handle a variety of inputs while preventing distortion - ultimately enabling clean, natural instrument and vocal sound.
- **Ease of Use** - the SLX-D is equipped with Guided Frequency Setup and a Group Scan feature that lets users set up multiple channels more efficiently by assigning frequencies to all receivers automatically via ethernet connections. Even for a 30+ channel system, the entire Group Scan can be completed within a few seconds.

Visit <https://www.shure.com/en-ASIA>

Firmware Update for Pliant Crewcom

PLIANT TECHNOLOGIES HAS released version 1.8 firmware update for all CrewCom wireless intercom systems and devices. This new V1.8 firmware offers several improvements, including refined communications for network devices, and provides an overall enhanced user experience for Pliant's CrewCom customers.

The 1.8 firmware update includes a new group management feature in CrewWare and a new two-level user rights feature. With a roaming bias option for CrewCom Radio Packs as well as the ability to connect/disconnect configured CrewCom devices without power-cycling the system, the 1.8 firmware update offers improved battery monitoring for the system's devices. Additionally, the 1.8 firmware does not require users to power cycle remote devices when power cycling the system's Control Unit, and there is full compatibility with the new Pliant 6+6 Drop-In Charger. The firmware update also adds mixed band options on 900MHz transceivers and enables use of GPO relays.

The V1.8 firmware and software update, as well as installation instructions and release notes, are available to all CrewCom users free of charge and can be downloaded via <https://plianttechnologies.com/downloads>

Avid Pro Tools S4 and S6 Configurator

USING A DAW CONTROLLER (Digital Audio Workstation), musicians and sound engineers get the most out of professional audio editing software. Qvest Media has developed an online "Configurator" for both of the modular Pro Tools | S4 and Pro Tools | S6 systems from Avid.

With the help of haptic and visual controls such as knobs, joysticks, faders and displays, audio professionals can simplify and accelerate their workflows and finish audio projects faster and more comfortably. Thanks to its ergonomics and flexible application and design options, the S6 has become a leading controller and is used in numerous recording studios worldwide. In 2019, Avid added the compact version S4 to the portfolio.

With Qvest Media's Avid S4 and S6 configurator, different layouts for both DAW controllers can be conveniently configured in an online application. Upon completing the configuration, the created design can be shared with one of Qvest Media's Avid audio experts for a profound product and system consultation.

Both DAW controllers support the open EUCON protocol which allows DAWs from other manufacturers to be operated with an S4 or S6. Furthermore, it is possible to control multiple DAWs simultaneously with a single controller.

Visit www.qvestmedia.com/avid-configurator



SLR Camera/Mobile Device Microphone

SENNHEISER HAS ADDED the new MKE 200 to its portfolio of audio-for-video microphones. The mini-microphone is designed for easy on-camera use with DSLRs and mirrorless cameras as well as mobile devices, where it ensures clean and crisp audio and gives that professional touch to video clips.

"With the MKE 200, we are offering creators the first step to upgrading their sound," said Tobias von Allwörden, Head of Portfolio Management – Audio for Video at Sennheiser. "Improved audio significantly increases the overall quality of your content. The MKE 200 makes this possible with its unique design which minimizes handling and wind noise. Simply attach it to the shoe mount, select the appropriate cable for your device and you're good to go!"

The MKE 200 features a directional design which captures the sound of your subject while rejecting unwanted background noise. To minimise any handling noise, the microphone is fitted with a clever internal shock-mount which acoustically decouples the capsule from the housing. To protect from wind noise, Sennheiser engineers designed the MKE 200 with an integrated layer of protective mesh inside the housing. This protection is further enhanced by using the included furry windshield when filming outdoors.

The MKE 200 features a compact, sleek design with a stylish finish thanks to a fully integrated shock-mount and built-in windscreen. Battery-free operation and a lightweight design allow for optimal gimbal performance.



The MKE 200 comes complete with a furry windshield, two locking connection cables for DSLRs or mirrorless cameras (3.5 mm TRS cable) and mobile devices (3.5 mm TRRS cable) plus a draw-string pouch for storage.

Visit <https://en-de.sennheiser.com>

CEDAR for Pyramix 64 v8

CEDAR AUDIO HAS ANNOUNCED the availability of CEDAR for Pyramix 64 v8 which, as well as offering improvements in other modules, brings all of the benefits of the latest machine learning and AI capabilities of Retouch 8 to the Pyramix platform.

CEDAR claims it invented spectral editing but, not content to leave things as they were, it has continued to research ways to improve it, making it faster and easier to use, able to cure a more extensive range of problems, as well as making it even more productive in a wider range of settings.

In the case of similar instances of unwanted sounds in a track – elements such as hi-hat spill, over-excited sibilants and plosives, or even the repetitive noises caused by machinery, one would traditionally remove these by identifying each event individually and then defining it manually, but now users can mark one of the offending sounds and ask the machine learning algorithm in Retouch 8 to find all of the other instances within the recording. They can then be eliminated individually or as a group using the appropriate Retouch tool.

In addition, the AI in the new Repair tool can identify, suppress, or reveal sounds while leaving the background in a marked region untouched. Unlike other spectral editing tools, only the significant signal within the region is processed; all low-level signals as well as the ambience are left unaffected.

The latest additions include:

- Retouch 8
- Auto declick
- Auto decrackle
- Auto dehiss
- Manual declick
- Dethump

Visit www.cedaraudio.com

Logitek Adds Dante Capability to Helix TV Audio Console

LOGITEK'S HELIX TV console package, a touchscreen audio console available in physical and "virtual" formats, now provides 64 x 64 channels of Dante audio along with AES67 networking.

Powered by the JetStream Plus audio router, Helix TV integrates easily with popular automation/workflow systems such as Ross OverDrive, Sony ELC and Vizrt's Viz Opus/Viz Mosart as well as various networking platforms such as Ravenna and Livewire. 24 mix-minus buses are available, as are frame delay, EQ, and dynamics at every fader. Faders on the physical surface are motorised for remote operation.

"The JetStream Plus router at the heart of our Helix TV system makes it easier for television stations to manage audio workflow, even from remote locations," said Tag Borland, Logitek president. "TV stations are continuing to look at ways to more efficiently integrate their studio equipment, and many of our customers have requested Dante capability along with automation system integration. We're pleased to announce that it's now available as a standard feature in the Helix TV."

Up to 240 channels of local I/O may be directly connected to a JetStream Plus; total networking capability including Dante and AES67 is 96 channels in / 64 channels out.

All new JetStream Plus/Helix TV systems will include AES67 and Dante; current users can contact Logitek to purchase an upgrade.

Visit <https://www.helixconsole.com> and www.onair.com.au

Etere Loudness Control System

AUTOMATION, PLAYOUT and MAM specialist Etere has introduced an advanced loudness control system, ETX-L Loudness Control, that enables greater flexibility in adjusting the threshold for loudness normalization parameters according to requirements.

Etere has released an advanced loudness normalization feature with EBU R128 and ITU BS.1770 algorithms signals to measure true-peak audio levels and adjust to the dynamic loudness range required by the station. Typically, loudness measurements uniformly integrate all programme material. However, there may be inconsistent loudness levels within different audio equipment. Additionally, broadcast audio can possess a greater dynamic range due to the use of digital media. As a result, the measurements may not be an accurate representation of the true measured value, thus losing consistency of audio levels between programmes and audio delivery sources.

Etere ETX-L Loudness Control unveils new capabilities to overcome this challenge by enabling loudness levels and dynamic range to be optimised according to the requirements of the station. The algorithm of Etere Loudness Control pre-reads audio data to determine the audio normalisation levels. It also allows loudness normalisation thresholds to be adjusted and modified as needed. When reading audio data, everything below the threshold will not be automated to avoid incorrect transitions. This enables loudness levels and dynamic range to be optimised according to the requirements of the station. The audio data is saved and used to regulate audio loudness range dynamically in live sources if audio data cannot be pre-read.

Visit <https://www.etere.com>



2NBC FM Goes AOIP for 30th Anniversary

2NBC FM IS A COMMUNITY RADIO STATION

based in Peakhurst, Sydney. It broadcasts in FM 90.1 MHz and also is available through Internet. Its transmission area includes the southwestern area of the city, taking in the suburbs of St. George, Canterbury, Hurstville, Rockdale, Marrickville and Kogarah, among others. Under the stewardship of station President Anton Bregovic and Director John Clarke, 2NBC is operated by more than 100 volunteers and has two on-air studios, a dubbing studio and a large music library.

2020 sees 2NBC FM celebrating its 30th anniversary with an upgrade to its facilities. For this task, 2NBC FM entrusted Broadcast Components and its team lead by Sean Pritchard to evaluate and develop the technical infrastructure and construction of new studios.

After studying several different alternatives, the system that was finally approved is completely based on Dante audio over IP technology, developed by the Australian company Audinate and integrated into broadcast-specific equipment by Spanish manufacturer AEQ.

2NBC FM two main studios now use AEQ Capitol IP mixing consoles, with specific functions for radio usage such as monitor cut, ON AIR signalling, microphone, analogue and digital inputs, several outputs for program, monitor and headphones, etc.

The equipment at each studio (except for the local inputs and outputs for microphones, headphones and monitoring) are integrated into the IP network. Each AEQ Capitol IP audio mixing console includes the Capitol Screen visualisation and operation-aid software tools, displaying the vu-meters, clock and channels' configuration on an external screen where control and operation are intuitive and easy.

In order to help with audience interaction, each console is equipped with the built-in double digital phone hybrid option, featuring AEQ exclusive technology, easing the management of phone calls, as well as on air and off-air conversations between two calls and the studio.

An AEQ Netbox 8AD interface with analogue, AES and USB inputs/outputs has been incorporated to this radio Dante network. This allows for the



integration of the external audio inputs, outputs to the transmitters and the dubbing studio mixing console signals into the IP network. The Netbox8 unit is used to convert formats, so any analogue or digital source can be integrated into the AoIP multichannel network.

Thanks to the remote assistance, configuration, test and start-up capabilities of AEQ equipment, the engineers at Broadcast Components are able to provide support without the need to continuously travel between the stations.

Visit <http://www.aeq.eu> and <https://www>.

Nine Launches Radio Buying on 9Galaxy, Cross-Platform Audience Matching

AUSTRALIA'S NINE ENTERTAINMENT is

simplifying the process for ad agencies to buy media across its radio assets with its 9Galaxy demand-side buying platform to offer access to radio inventory from November 1.

Nine says this will make it far easier for agencies and marketers to brief and buy Nine across all broadcast platforms, giving them a more efficient process of buying, faster response times and clear post-analysis reporting.

"9Galaxy has led the way as Australia's most advanced automated buying platform for TV and BVOD inventory since 2018 and will from November 1 make the transactional and reporting process of radio inventory more efficient too," said Richard Hunwick, Nine's Director of Sales – Television and Radio.

The 9Galaxy expansion comes after a year in which Nine has substantially refreshed its line-up of radio stations in Sydney, Melbourne and Brisbane. 9Galaxy will now integrate with the industry buying platform RadioMATRIX to make the process of buying talk radio simpler and

more effective than ever.

Nine also confirmed that in early 2021 it will also open up its 9Voyager self-serve automated buying platform to radio, adding it to the company's television and digital options. Based on the 9Galaxy platform, the self-serve platform was built by Nine to target small and medium enterprises (SMEs) as an alternative to Facebook and Google.

Hunwick said: "It has been a big year at Nine Radio. We're asking marketers and agencies to examine our radio proposition – it is talk radio for a new generation. We are asking you to put us onto each and every brief and let us come back to you with a solution, and with innovations like RadioMATRIX it has never been easier to do so.

"However, we don't just want to make briefing us easier. We also want to make buying us more efficient, which is why we are moving quickly to integrate our radio inventory into the 9Galaxy and 9Voyager platforms."

Nine has also moved to integrate the data assets of its radio stations, which have millions

of Australians listening each month, into its wider data lake of more than 13 million signed-in users.

Hunwick noted that the data integration of signed-in users from 2GB, 3AW, 4BC and 6PR would add a powerful new element to Nine's data proposition with its 9Tribes product, which is segmented into 54 Tribes across nine verticals that are now available on display on Nine Radio sites and will soon be available on catch-up radio and podcasts.

Nine has also announced Audience Match, a custom destination designed to give marketers the ability to activate people-based audiences across all of Nine's properties. As part of the Audience Match launch, Nine will develop a purpose-built solution directly into Nine through Adobe's data management platform (DMP), Adobe Audience Manager. Audience Match will allow Nine to assist brands in matching their customer data to Nine's 13 million registered users through one streamlined integration.

Visit www.nine.com.au



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Euro Deadline for Digital Radio in Cars

DIGITAL RADIO ROLLOUT in automobiles will receive further impetus throughout Europe with an impending adoption deadline for the European Electronic Communications Code (EECC), which must be transposed into national legislation by EU Member States by 21 December 2020.

The regulation, which applies to all EU member states – regardless of the status of DAB in each country – also gives countries the opportunity to introduce new legislation regarding consumer receivers.

Several EU countries, including Germany, the UK and Italy have already introduced regulations to implement the EECC directive into national legislation.

In Germany, all radio receivers in new cars will be required to include digital radio capabilities from 21 December 2020. In the UK, all radios fitted in new passenger cars will come with digital radio as standard from 2021 following new regulations passed through Parliament. In Italy, all new (consumer and automotive) radio receivers sold from January 2020 onwards are required to include DAB+. In France, a proposal requiring all new car radios to include digital radio capabilities – in line with the EECC deadline – is being reviewed by parliament. Spain recently published a draft of its Telecoms Regulation, which also complies with the EECC. Other countries including The Netherlands, Belgium, Denmark, Sweden, Austria, Greece, Czech Republic, Poland and Malta have all initiated procedures to implement the EECC into national legislation.

Patrick Hannon, President of WorldDAB, said: "The EU decision to mandate that all new car radios should be able to receive digital terrestrial broadcasts has transformed the prospects for DAB+ radio in Europe. A growing number of countries are transposing the directive into national law. We urge countries that have yet to implement the EECC to act imminently and help ensure that motorists in all EU Member States benefit from the advantages of digital radio – greater choice, clearer audio and enhanced data services."

Visit <https://www.worlddab.org>



Logitek's JET67 AoIP Engine Now with Dante Option

DESIGNED FOR RADIO APPLICATIONS, Logitek's JET67 provides an inclusive option for broadcasters who need access to various forms of audio networking. Its on-board AES67, Ravenna, Livewire and Logitek JetNet networking enable easy interconnectivity with most other equipment in the studio; stations that also operate Dante-enabled equipment can now access this capability via an extra-cost module.

The power behind Logitek's new mixIT touchscreen consoles, the 1 RU JET67 provides multiple analog and digital inputs and outputs, mic inputs with phantom power, multiple mix-minus buses, and EQ/Dynamics control along with routing functions. Logitek's advanced touchscreen console, Helix, may also be operated with JET67 although some features such as profanity delays are not available.

"We designed JET67 to take care of everything a small to medium market Radio broadcaster will need, with no hidden surprises in the equipment costs," said Tag Borland, Logitek President. "Other budget-minded mixing and routing engines require the purchase of external microphone processors, dynamics processing or even networking options. JET67 has all of these and when paired with the mixIT surface, brings a highly versatile touchscreen console to even the smallest operation."

Visit <https://logitekaudio.com> and <http://onair.com.au>

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WorldDAB Urges Priority on the Visual for Car Radio

WORLD DAB HAS LAUNCHED a campaign with the support of its Automotive User Experience (UX) Group members to encourage broadcasters to use their visual assets to keep digital radio prominent in car dashboards.

The campaign underlines the important role visual information now plays in providing a positive digital radio experience for drivers – and it offers guidance to broadcasters on how to use information they already have in the form of metadata to provide a richer experience for the driver.

Metadata enables the visual information, text and graphics (e.g. station name and logo, presenter, song title and album artwork) to be displayed on the dashboard while a specific station is playing, as well as the development of a good hybrid radio user experience.

“Car manufacturers need the confidence that broadcasters are going to provide metadata, and that in turn will ensure that they prioritise the

radio user experience in their cars,” said Laurence Harrison, Chairman of the WorldDAB Automotive Working Group. “As car dashboard screens get even bigger, radio station metadata will be even more important to power a rich user experience.”

To support the campaign, WorldDAB has produced a number of resources to help broadcasters, including:

- Animated video explaining why it's important for broadcasters' stations to have a visual presence in the car, and how this can significantly impact the digital radio experience for drivers;
- Information Sheet aimed at senior radio managers and those working at a more technical level giving information on: The exact type of metadata the car industry requires; Why metadata is important for broadcasters and drivers today; How broadcasters can effectively provide metadata; and Metadata requirements and other technical information; and



- Video presentation to promote the use of metadata more widely within the broadcasting industry and raise awareness on the importance of metadata.

The campaign is part of WorldDAB's ongoing work to improve the user experience of digital radio in the car.

To find out more, contact metadata@worlddab.org

GatesAir Integrates AOIP Transport within Radio TX

GATESAIR HAS ANNOUNCED two new Intraplex IP Link Audio over IP innovations. The IP Link 100e is the Intraplex family's first modular plug-in card built for integration within radio transmitters, while the IP Link 100c is a new compact hardware codec built for remote contribution and standard STL IP connections.

The IP Link 100e is purpose-built to receive FM and digital radio content directly within GatesAir Flexiva transmitters. The module is added to Flexiva FAX excitors to reliably receive and feed AES67 and other Audio over IP formats direct to the exciter. The smaller, integrated form factor reduces the cost of using Intraplex Audio over IP transport at the transmitter site since no separate hardware codec is required, and frees a 1RU equipment rack slot for auxiliary equipment.

The module retains all functionality associated with IP Link codecs. In addition to GatesAir's traditional robust connectivity, the IP Link 100e builds GatesAir's industry-first Dynamic Stream Splicing (DSS) software into the module.

DSS software sends multiple identical streams over the same network or two separate paths, and each stream borrows data from companion streams to avoid service interruptions from packet loss. The IP Link 100e also supports the SRT (secure reliable transport) protocol and provides failover service to Icecast or locally stored audio for optimal reliability.

The module also provides storage for program content and full duplex capability, allowing engineers to monitor signals off-air.

The IP Link 100c also adopts a cost-reducing strategy but within a standard hardware codec. GatesAir has halved the form factor to better serve portable applications, providing a half-rack-unit footprint ideal for remote broadcast and studio-to-studio applications. The codec design includes a DC power supply, allowing broadcasters to quickly plug in and stream



program audio for sports contribution, live remotes and news coverage, for example.

The IP Link 100c is also suitable for STL service, particularly as an affordable backup for primary STL connections, or for delivery to Icecast streaming servers. As with the IP Link 100e, this codec integrates standard Intraplex features such as Dynamic Stream Splicing software, SRT protocol support, and three separate network ports.

Visit www.gatesair.com

News Production and Payout from CGI

CGI'S NEWSBOARD enables journalists and editorial teams to organise story-centric production processes directly from anywhere they are working in the world. It uses a customisable and open widget architecture that allows newsrooms to stay flexible to workflow adaptations and allows journalists and editorial teams to organize the story creation process from research, to cross-media planning and distribution of news. All departments gain complete visibility into topics, while information from integrated widgets, such as Google Maps, social media, web CMS and more helps ensure journalistic teams are on top of the story.

Meanwhile, with StudioDirector 2.0, MOS integration is extended out from the NRCS to

studio automation software, enabling a whole range of time-saving tasks to be completed directly from the running order. Each studio layout for a specific show is defined within separate models that contain all mandatory graphics elements, video clips, camera, live, microphone and other directives, and the essential MOS commands for running studio automation. Journalists and directors simply select the desired studio layout for their stories in a show from a predefined list of models. Repetitive tasks, such as insertions and coding the story with the proper automation commands (graphics, camera directives etc.) are all managed by StudioDirector.

Recognising there are more self-operated

studios in existence than ever before as the media landscape shifts, the OnAir Player is effectively an all-in-one studio command centre. Its modular interface and features have been optimized to give solo radio DJs unmatched control over the content and presentation of their broadcasts, even in extremely demanding environments such as OB. Tasks such as adding an audio or live feed to a schedule, creating a mix between upcoming songs, or editing a text have all been designed to take as little time as possible, with most everyday jobs contained within the single platform.

Visit <http://www.cgi.com/mediasolutions>



Making the Remote Broadcasting Connection with Digigram

THE LATEST ADDITION to Digigram's IQOYA range of IP-based solutions, IQOYA Connect is a cloud-based service designed for broadcasters to manage and monitor their fleet of codec and comms, whether they are located in the studio or a remote location. The service works with Digigram's IQOYA Talk portable IP codec, IQOYA Mobile+Q-Mic smart phone codec app, IQOYA X/Link remote studio codec, IQOYA Guest browser-based remote interview solutions, as well as a number of other Digigram and third-party solutions.

What distinguishes the platform is that it enables the codec equipment to be accessed via two different user interfaces – one for journalists/production staff and the other for engineering/technical personnel, according to user account permissions.

According to Christian Bartl, Presales Engineer at Digigram in Singapore, "It's a SIP infrastructure with session portal controller and measurements in the background, all available as a Cloud service, so running on different locations around the world, so we are hosting these services and we are basically, a huge SIP infrastructure that we use to connect all our hardware codecs or software codecs."

C+T: Where are the points of presence?

"At the moment, it's in France and it's in Australia."

What does the workflow involve?

"Basically, it's a Cloud service, so all your devices you can just log in to the devices with an account and the devices automatically connect to the Cloud services and once the devices are connected there, then you can control and manage all the devices from this Cloud service.

"Basically, once you are logged into the devices, then you manage everything from the web interface for IQOYA Connect, you can manage the device settings directly. Let's say, there are two different philosophies. One is the studio codecs, where you can prepare the setup and the audio configuration within the Cloud service and then push these settings to the stationary codecs. That is one philosophy, and then the other is for the remote codecs, that is more user-centric than technical-centric, so it means you have a kind of user setup and every user can prepare a kind of pre-set for themselves and once the user takes, let's say the IQOYA Talk, and log in with their own user account to this device, then it automatically pulls the auto configuration that is made within the Cloud services, pulls to the device, and then you can use your individualised setup, so then all the settings for your microphones, all your audio monitoring are all tied to your user account and it just will pull to the device then directly, once you log in."

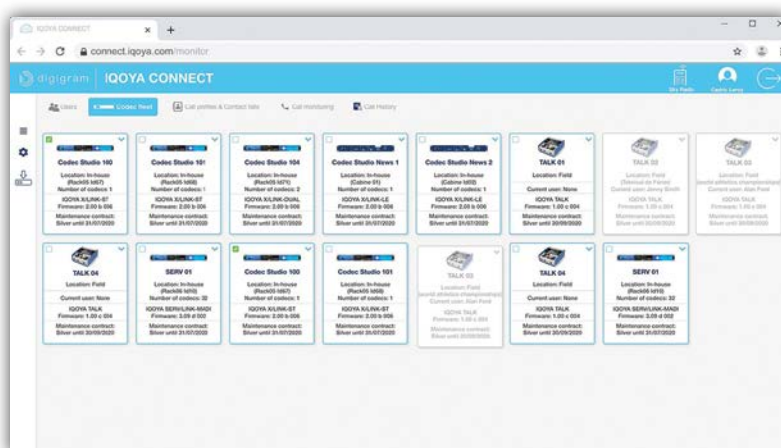
Is latency an issue?

"Of course, there is latency because we're talking about Internet connections, so it always depends also on the Internet connection on the service provider, how you are connected, are you connected, are you connected directly with a direct Internet connection? There are latencies that we cannot influence but it's not comparable with video codec where we talk about three seconds to ten seconds latency, here it's more about under a second. It can be optimised to under a quarter of a second or something like this, so really you have the chance to optimise the connection or the parameters.

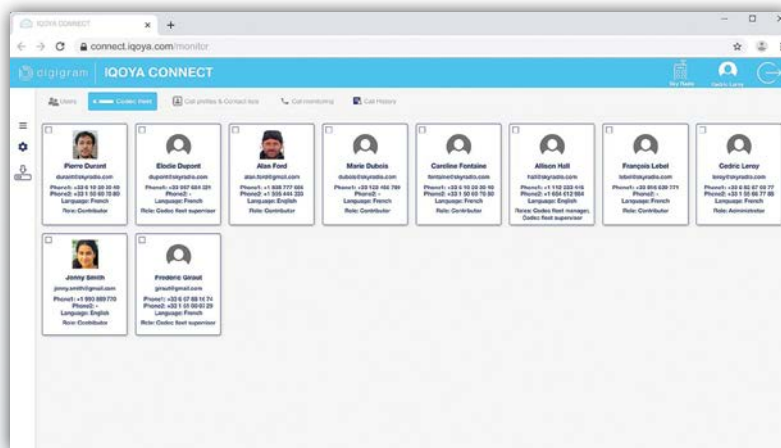
"If we talk about the IQOYA Talk, basically you have two codecs there. One is dedicated for the program and one for the talkback, so the program, the intention is to have the most reliable connection. If we say, 'Yeah, okay, we have a bigger buffer so we can compensate for any networks congestion', then we intentionally increase the latency. But if we talk about the talkback channel, then we say, 'Okay, we don't need this reliability, we don't care about if there's maybe one millisecond of the audio is not transmitted', then we can optimise the connection more for latency."

If you have multiple contributors or you're in a multiple interview situation, how does it work in that sort of case?

"Well basically, you are in your studio and let's say, in your studio you have eight or multiple studio codecs there, or with the SERV/LINK, which is our multichannel codec, there you can connect up to 32 contributors. It means



IQOYA Connect's technical or fleet management view.



The view for production and on-air staff within IQOYA Connect.

if you have one of the huge SERV/LINK devices all the power can connect up to 16 talks with two channels of program and talkback channels, and then you use Audio-Over-IP to connect to your audio mixer, then your audio mixer can be the central point to connect all the sources and to coordinate this, to connect it also to a talkback system that can take over the coordination for all the talkback channels. This is basically how you handle then all the sources, so your mixer is still your central operation tool in the studio, and you have all the sources available there in the same way as you might have your microphones there if you do it locally."

And you can vary the bit rate to compensate for poor connections?

"Exactly. At the moment what we have is you can really adjust according to the quality and what is the next step, what we bring now, is really to have a kind of intelligence behind this to adjust the connection automatically - to be able to always have the optimum quality but still reliable connection. This is the next step.

And what about security?

"When we talk about how we did remote broadcasting in the past, is really to make direct connections to open firewalls, to set port forwardings, and all these kind of things that compromise security. This we really tackled with IQOYA Connect with this [session portal control infrastructure really to optimise the security for our clients so that we can really provide the most secure connection without compromising their security. Especially in broadcast, it is very tricky and this kind of onion principle in the networks, so we really accommodated for this to provide the most reliable security that we can provide with Cloud services."

So, more secure than a Zoom meeting?

"I would definitely expect so."

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Southern Cross Austereo: Opportunity's NOC

DISTRIBUTION AND TRANSMISSION AT

Australia's Southern Cross Austereo has undergone profound change over the last few years. With television playout outsourced to NPC Media and transmission in the hands of BAI Communications (formerly Broadcast Australia), the radio operations of SCA began to look at leveraging its investment in IP infrastructure in the form of remote production and a new Network Operations Centre (NOC).

According to Dan Jackson, Head of Engineering, Southern Cross Austereo, "It gave us the opportunity to really look at what have we done in the last four, five, six years, that could enable us to create a NOC or recreate the NOC and maybe paint it in a different light. We've made a heavy investment in IP-based technology for the last decade. We've had this rolling update of studios every year and we've gotten efficient at that. We've further deepened our partnership with the Telstra which saw us play a large role in the creation of LANES [Telstra's Enterprise LTE Network], we've got a really good core framework of IP-based technologies which allows us to playout our 148 audio services across our 45 radio markets. With our outsourcing of transmission, our investment in IP technology, our large Zetta (radio automation software from RCS) rollout, it was clear time that we look at whether we can take advantages of all that work that we've done."

The result is a new, streamlined Network Operations Centre installed at SCA's Sydney CBD headquarters in a former meeting room, a space which recommended itself, in part, because of its independent cooling system.

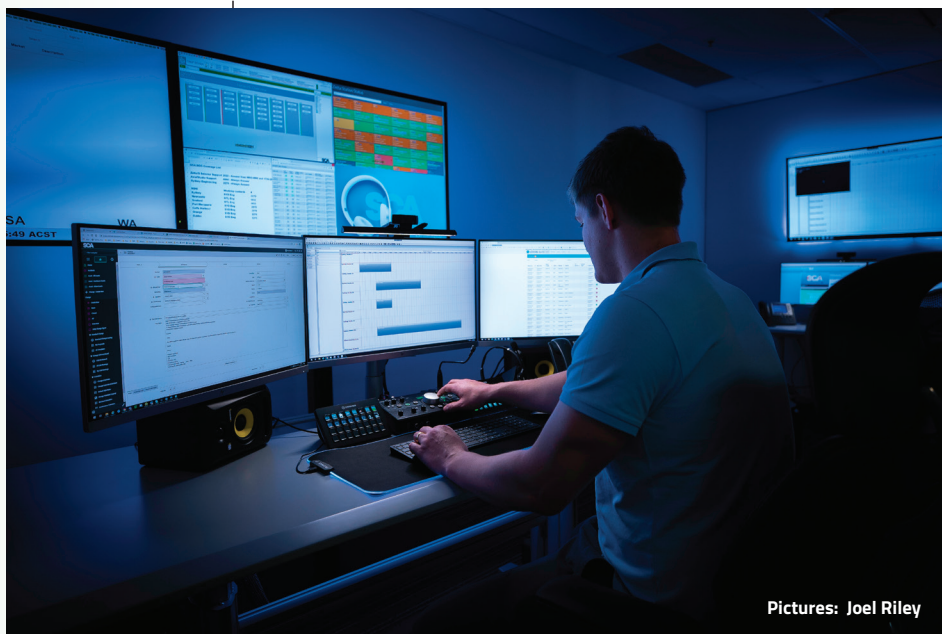
"In the first instance, we only cover the audio side of the business," says Jackson. "But, obviously as we bed in the NOC, it will then expand out to cover NPC and obviously other parts of the business being digital and a few other components as well. This also really simplifies the communication between Broadcast Australia's NOC and, now, SCA's NOC."

"The technology hub of SCA is also here in Sydney as well," says Dan Jackson. "There are 80 technology staff across all disciplines, IT, digital and engineering. It made sense to have them in and amongst the action. From a DR perspective, in the event of a major incident, we've got the command centre basically ready to go and the room, other than the two operator desks, has extra space for extra people. In the event of a big incident, which are pretty rare these days, we have that ready to go."

During planning for the new NOC, SCA was also able to leverage the knowledge and experience gained from its former operations facility in Canberra which was closed in March 2020 following transfer of play-out functions to NPC Media.

"We still have our previous Canberra NOC manager who now looks after our NPC relationship and he's a plethora of knowledge," says Jackson. "We were able to get a better understanding on all the intricacies of running a 24-hour operation, but what's also important is that the person who will be running the Network Operations Centre in Sydney is a gentleman by the name of Ben Fransman, he's got years of experience at Channel 10 and TABCORP running 24-hour pres and NOC type arrangements, so he understands the complexities of running a 24-hour operation."

"We did a lot of prior planning. We tried to not to use any physical



Pictures: Joel Riley

infrastructure that ties us down into the Sydney office. Basically, the design and the architecture of the NOC is that okay, we've got the screens and they look fancy, but because everything's IP-based, it's all exception-based reporting, so they're basically looking at a blank screen until something pops in there and then they need to follow a matrix on how to escalate or how to solve that issue. Everything in that room is either web-based or virtual, so in the event of an evacuation, the guys can grab their emergency laptops, head out to a café and they can still have the capability to not only answer

the phone via a soft phone, but also via an IP intercom, so they can still intercom back to the studios from a local café via a web interface."

For program monitoring, Jackson's team has enlisted prosumer streaming technology in the form of Stream Deck from Elgato.

"The operators use those to control everything and anything, they can listen to any audio source, they can view cameras in all of our studios and they can just flick around the country by the single push of a button," he says. "If that breaks, we just go down the stairs to JB HI-FI and buy a new

one. If we need to evacuate the building, as I said, we just go down to JB HI-FI and grab a new one. They're very cheap and because it's all IP-based and we've got a fairly robust network and infrastructure at SCA, the likelihood of us having to leave this building and not being able to get access is very small."

When it comes to incident reporting by local stations and remote staff, contact is facilitated via an intercom gateway based on Axia AoIP technology from the Telos Alliance, as well as a telephone hotline number.

"We're now able to provide a service to the other 40-odd radio markets that didn't have someone available at the end of an intercom," says Jackson. "We went in there saying, 'we don't want to change the behaviours of our content and producing teams, we want them to do exactly what they do today tomorrow'. Now, historically, intercoms are only local and they only work internally into the market. We've worked with our systems engineers here in Sydney and across the group to create effectively an Axia Intercom gateway that sits in every market and now, if I'm in Newcastle, I can hit the NOC button and it will go straight to Sydney to both operators and whoever answers then creates a talk line between the two."





SCA Remote Production Tied Up with Tieline

ACCORDING TO DAN JACKSON, Head of Engineering, Southern Cross Austereo, the network has enabled remote production using the ViA remote codec from Australian audio codec manufacturer Tieline.

The ViA platform has six IP interface options, including dual Ethernet LAN ports, two USB modems, an internal dual active SIM LTE module, or built-in Wi-Fi. Program connection types can be selected using the unit's touch screen. A 3x mono connection allows more flexible connection options while IP streaming has been enhanced with support for configuring up to 3 SmartStream PLUS redundant streams per audio stream. This means that four simultaneous audio streams can be transmitted using different IP interfaces, which reduces the chance of lost IP packets over networks like the Internet.

Other features include:

- Support for FTP of audio files to allow uploads of locally recorded files for news ingest or podcasts.
- Support for Wi-Fi Hotspot mode and tethering of Android smartphones.
- The Connections panel in the Toolbox Web-GUI now allows editing of programs and dialing endpoints.
- Support for SIP EBU 3368 profiles.

In Melbourne, where staff have been under lockdown, SCA has been using the Tieline technology in conjunction with Telstra's 4G network.

"We have access to the LANES network [Telstra's Enterprise LTE Network]," says Dan Jackson. "LANES is what we call it, but effectively it gives



Tieline's ViA remote codec.

us priority and quality of service on cell towers. We sit in between emergency services and the general public. That enables us to ensure that we get continuity in our broadcast, but it's generally just the ViA, a small little modem with the LANES SIM in it and a laptop with Zoom and that's about it. This stuff's pretty robust, right, you can almost throw the ViA at the wall and it should survive. That's the way they were designed, because they were going in the homes and hands of talent. It's just a box to them, they plug their microphone in and away they go.

"We've been doing Melbourne now for six months. Six months we've been remotely broadcasting. We still have panel operators coming into the studio, but that's it, just panel operators. I have one engineering staffer go in one day a week, because it's still a big office and there are still lots of things to be done physically, but in terms of the show and the continuity on the air, it

hasn't really skipped a beat. It's been really good.

"Remote broadcasting for us is not a new thing. We had Kate Langbroek in Italy last year, Eddie McGuire, we kind of follow him where he goes in terms of his breakfast show, so when we did go into lockdown, it wasn't anything new to us. We knew exactly what to do. I think for us it was just getting enough infrastructure. We had to pull some resources back from our football kits because obviously AFL and NRL weren't running at the time, so it was made a bit easier. But the second time we went into lockdown in Melbourne, obviously AFL and NRL were running, so we had to pull kits from other markets and WA obviously not in lockdown, so we had to get some equipment from them. But mostly it's been really good."

Visit www.tieline.com/via

"We have three new operators that we've recruited who are a mix between MCR and NOC operators. We've got a few people from Sky Racing who more understand the fundamentals of a broadcast and the flow and the operational side, as opposed to understanding what an IP packet does. It's a good mix of skills and capabilities in the NOC to help not only manage the alarms and the incidences, but also to be almost part of the show. The way we've sold this NOC in is that it's not just a technical NOC, it's somewhere between your TV MCR and pres and your traditional NOC. The team will be very closely involved with the shows, particularly the breakfast shows in the morning, making sure that all the lines and talent and interviews are all proactively looked after well ahead of time and the fact that they can communicate directly with producers down an intercom just makes that so much easier."

DISASTER RECOVERY

Complementing the NOC is what Jackson describes as a "very robust" Disaster Recovery solution through Microsoft Azure. In the event of a prolonged outage, SCA's office in the NSW Central Coast city of Gosford, which hosts the broadcaster's payout support team, is able to set up a DR NOC.

"In Gosford, we have an automation and payout team," says Jackson, "so they're effectively responsible for the Zetta systems and GSelector scheduling systems, which for us is enormous. We have the biggest Zetta system in the world in a decentralised manner. SiriusXM [in the U.S.] have 400 stations, we don't have that many, but theirs is in one data centre and it's one database. We've got 42 databases spread across the country, so it's a very complex beast. We have four people that manage that in a room. They've got the screens on the wall and they've got all the workstations and they've got the ability to listen to any audio source from any market.

"It's a facility that we could, quickly, in the event of an evacuation, spin up. In fact, the automation team, they could even proxy in as NOC operators. They know enough about the infrastructure and the systems. In fact, they're Level 2, so the lion's share of escalations that will come through the NOC will end up going to that team anyway. In the event that seven people are struck down with an illness, god forbid, we do have some backups in place to ensure that we can continue to provide the service."

OTHER EFFICIENCIES

Another productivity pay-off of SCA's investment in IP infrastructure has been a more efficient management of production resources.

"We've employed Scheduall which is the Net Insight product. So, we've done a really deep dive into our studio infrastructure. We've got 150 studios at SCA. Now we have a really deeper understanding of how many microphones are in each studio, is there a webcam?, is there Zetta?, is there phone box?, can I have a virtual director camera?.

Now we've pulled all that data into the Scheduall resource management tool, we've created a portal for our users to book these lines in the studios. Historically, the Triple-M studios on the Triple-M floor were only to be used for Triple-M and that is all. There used to be a time when your studio had to be on the air through the console in the studio, so you couldn't touch the console once it was in automation. We don't have that anymore, it all goes back to the control room, so we just have empty studios doing nothing. What we want to do is get a lot better efficient use out of our studios, so things like PodcastOne and any of our on-demand platforms are able to actually utilise that space. Having an understanding of what's where is obviously important because if you need to book a room with six microphones and we stick you in a booth, it isn't going to work. The NOC team will also be responsible for the management of those audio resources as well."

Etere Provides RTMP Input and Integrated Time Delay

THE 4K-READY Channel-in-a-Box solution Etere ETX is designed to deliver audio and video content via the Internet, giving users greater freedom when it comes to their live streaming setup with the option to select an RTMP stream as an input source.

An integrated time delay feature allows the flexibility to configure a delay between preview and real-time. The time delay technology of CensorMX is now integrated with both Etere ETX and Etere CensorMX. Time delay can be used in live broadcast to prevent unacceptable content such as profanity and bloopers from making it to air. Not only that, it also enables a multi-language live commentary.

Etere allows users to customise the details of their time delay including:

- Set the number of frames to delay the stream for frame accuracy.
- Adjust compression quality.
- Set a time interval for the synchronisation of delayed video.

Etere ETX provides synergy between playout, ingest, automation, master control and graphics environments. It supports SDI, IP and NDI transmission. Etere ETX integrates all the features to bring a channel on-air, including closed caption and live subtitling insertions, graphics insertion on up to eight layers, integration with the Etere Master Control touch screen panel for the simultaneous management of multiple channels, virtual machines capabilities and cloud support. It can also be integrated with Etere's ETX-M Multiviewer which lets you monitor unlimited video sources on a single display.

Real-Time Messaging Protocol (RTMP) is an Adobe Proprietary protocol for the high-speed streaming of audio, video and data over the internet. Based on Transmission Control Protocol (TCP), RTMP provides optimisation of video and audio data transmission. In RTMP streaming, the server divides the information into segments to enable a smooth display with as much data delivery as possible. While Etere is not a streaming server, users can send RTMP streaming from Etere to a RTMP streaming server. Additionally, it is also possible to receive RTMP streaming through a remote URL and playout in Etere.

Visit <http://www.etere.com>

Monitor and Diagnose ST 2110 IP Broadcast Production Video Networks

THE NEW INSPECT 2110 Probe from Telestream monitors TS 2110 video streams across a production or contribution network to make sure they are present and working as expected. A notification will be triggered if the format, video, audio or data has errors or differs from the SDP file. Thumbnails provide visual indication of program status, and penalty box provides immediate visibility of error conditions for diagnostics.

Inspect 2110 Features:

- Up to 100Gbps of monitoring capacity for up to 100 ST2110 essence streams
- Confirm video streams are present and correct including format, video, audio, and data
- Ensure redundant video streams are the same and healthy
- Check that PTP synchronisation is correct and operational
- View network traffic and program flow through the network
- Link to PRISM to enable detailed analysis
- IP Video Monitoring

PTP timing and synchronisation is critical for IP video networking, and Inspect 2110 verifies that synchronisation is operating and correctly sync'd across video, audio and data streams.

Inspect 2110 provides PTP status monitoring and PTP metrics reporting and simplifies automated detection of PTP issues and diagnostics, saving time and reducing errors.

Users can easily view program details including format, video, and audio as well as A/B redundant stream comparison and health checks. Inspect 2110 provides support for IP Standards including ST2110-10, ST2110-20, ST2110-21, ST2110-30, ST2110-40 and ST2022-7.

A direct link to the PRISM Media Analyzer provides deep video waveform analysis, with multiple PRISM units able to be linked to any Inspect 2110 Probe.

Inspect 2110 software uses a high-performance container-based architecture supporting up to dual 100G Ethernet in a server configuration now, plus virtual and cloud configurations near term.

Visit <http://www.telestream.net>

Magewell Adds NDI|HX Support

MAGEWELL HAS ANNOUNCED new updates for the company's Pro Convert for NDI to HDMI and Pro Convert for NDI to HDMI 4K standalone IP decoders that further expand the devices' support for Newtek's evolving NDI media-over-IP technology. The free upgrades add compatibility with the high-efficiency, lower-bitrate NDI|HX mode in NDI 4, complementing the decoders' existing support for full-bandwidth NDI streams.

Magewell's Pro Convert NDI encoders and decoders let users reliably bring traditional video signals into and out of IP-based production and distribution workflows, enabling existing sources and displays to work seamlessly in next-generation media infrastructures. The Pro Convert for NDI to HDMI and Pro Convert for NDI to HDMI 4K decode NDI input streams for output to HDMI monitors, projectors, production or distribution equipment. In addition to NDI technology, the decoders also support SRT, RTSP, RTMP, UDP, RTP and HTTP (HLS) streams with H.264 or H.265 compression.

While full-bandwidth NDI offers the highest quality and lowest latency, the bitrate-efficient NDI|HX mode supports full-resolution, full frame-

rate video delivery over wireless and limited-bandwidth networks. In addition to supporting the NDI|HX technology in version 4 of Newtek's NDI Embedded SDK, the Pro Convert decoders can be configured for compatibility with earlier NDI|HX variants implemented in some of the first NDI-compatible PTZ cameras and accessories. The update also incorporates other new NDI 4 features including Discovery Server support, enabling the use of NDI devices across multiple network segments.

The Pro Convert for NDI to HDMI 4K supports NDI inputs up to 4096 x 2160 at full 60 frames per second, while the Pro Convert for NDI to HDMI decodes 1080p60 and 2K sources. Both models automatically optimise output parameters to match the capabilities of the connected HDMI display, using FPGA-based video processing to perform high-quality up/down-conversion between HD and 4K.

Visit <http://www.magewell.com>



Signiant Issued Patent for Transport Architecture, Recruits Aspera CTO

SIGNIANT HAS ANNOUNCED it has been issued patent number 10,735,516 by the U.S. Patent and Trademark Office for its invention titled "Cloud-Based Authority To Enhance Point-To-Point Data Transfer With Machine Learning." The patent describes methods and systems that incorporate machine learning to evaluate anonymised historical transfer information collected by its SaaS products. This history is used as training data to build a model that predicts the fastest possible way to move or access media.

Signiant's intelligent transport chooses the optimal number of parallel transport streams and selects either standard TCP or Signiant's proprietary UDP-based acceleration protocol based on a variety of inputs including current and historical network conditions, available compute, storage type and the characteristics of the data set. The new architecture is capable of multiple Gbps transfer speeds and is already deployed in Signiant's SDCX (Software-Defined Content Exchange) SaaS platform for transfers between public and/or private cloud services and/or storage. The platform is capable of working with any size file, data sets with an unlimited number of files as well as growing files and streams.

"When early transfer tests showed speeds greater than 10 Gbps using settings derived through machine learning that weren't intuitive or obvious, we knew we were onto something disruptive," said Signiant CTO, Ian Hamilton. "As networks evolve and increase in bandwidth, Signiant's transport becomes even more valuable and is now capable of speeds of 10s of Gbps. Standard transfer tools simply aren't designed to take advantage of available bandwidth and so with today's fatter pipes, this new architecture becomes even more critical as datasets get bigger and workflows are increasingly globally distributed."



New Signiant Chief Solutions Officer Mike Flathers

In order to take full advantage of available bandwidth, Signiant's machine learning algorithm examines past history and optimally configures application-level and transport-level parameters for both file and live media transfers. Not only does this ensure an optimum result without expensive and error prone manual tuning and tooling, but results improve over time as the system learns. In addition to Signiant's patent-pending intelligent transport, Signiant's core UDP-acceleration protocol offers distinct advantages. Signiant isolates different sources of congestion by looking at latency and packet loss, and also by constantly examining the rate of change in these observations. As such it can differentiate between edge and core network congestion and react accordingly.

Signiant Inc. has also announced that Mike Flathers is joining the company in the newly created role of Chief Solutions Officer. He will be a member of Signiant's senior leadership team and report directly to CEO Margaret Craig.

Flathers joins Signiant from IBM Aspera, where he was most recently Aspera CTO and an IBM Distinguished Engineer. An expert in IP networking technology, he spent 8 years at Aspera and remained with the company after its acquisition by IBM. Earlier in his career he held positions at Novell and Sorenson Media.

Visit <https://www.signiant.com>

V-Nova and NETINT Enhance Transcoding

V-NOVA AND NETINT Technologies have announced a collaborative roadmap that accelerates V-Nova's MPEG-5 LCEVC (Low Complexity Enhancement Video Coding) market deployment while further improving the performance of NETINT's encoding technology.

NETINT Technologies launched the Codensity T408 video transcoder platform featuring real-time, high-quality, scalable H.264/H.265 ASIC based transcoding for live video streaming at up to 8K. Packaged in a 2.5-inch U.2 module form-factor for easy field upgrades, the T408 features sub-frame encoding latency that ensures an immersive experience for interactive video services and ultra-low-power and high density encoding for Edge based deployments.

MPEG-5 LCEVC (Low Complexity Enhancement Video Coding), the latest MPEG standard, is a codec enhancement technology designed to enhance the video streaming performance of existing and future codecs. V-Nova LCEVC is a multi-platform software library for MPEG-5 LCEVC that improves the compression quality of any base video codec by up to 50 percent whilst simultaneously accelerating encoding by up to 4x. Any playback device supporting the underlying codec can be quickly upgraded in software to gain the benefits.

Leveraging V-Nova's LCEVC, the T408 transcoder module's performance will be enhanced with increased encoding quality and throughput. These improvements will provide access to V-Nova's LCEVC technology to a wider market, increasing the viability of new emerging services including cloud mobile gaming, social mobile video, and live streaming of UHDTV content.

Visit <https://www.v-nova.com> and <http://www.netint.ca>

Cinegy Multiviewer 15.2

CINEGY GMBH HAS RELEASED the latest version of Cinegy Multiviewer 15.2 designed for on-premise and remote monitoring applications.

Streams from satellites, camera feeds, playout devices and other local or remote sources all need to be monitored. Cinegy Multiviewer displays and analyses these signals, raising alerts for any detected signal problems. Running as a service operating on commodity IT equipment, video streams can be received over IP, eg UDP/RTP, NDI, SRT via Ethernet or using standard SDI cards.

Features introduced include latest version NDI support, using Cinegy Encode as an SDI output option, SRT encapsulated IP input and output stream inputs, and support for encrypted SRT streaming on input. Multiviewer Version 15.2 also offers further enhancements of its SRT support with additional SRT output encryption support along with DNS resolving for SRT URL addresses.

Cinegy Multiviewer 15.2 also fully supports 8K workflows via IP or SDI. Cinegy's 8K capabilities were first deployed in 2015 upon the release of its Daniel2 codec which at the time was capable of decoding 16K video at 280 fps with an Nvidia Quadro M6000. Cinegy has further optimised and integrated Daniel2, making it ubiquitous through the software product range. Cinegy Multiviewer 15 joined Cinegy Capture PRO and Cinegy Air PRO in supporting 8K, via IP (SRT/RTP/UDP), SDI, NDI (e.g. BMD DeckLink 8K Pro) confidence software broadcast solutions when the major update v15 was released earlier this year.

Visit <https://www.cinegy.com>

TAG Video Systems Supports CMAF Streaming

TAG VIDEO SYSTEMS, the developer of monitoring and multiviewing solutions has announced support for the Common Media Application Format (CMAF). The move will allow OTT customers to take advantage of more diverse platforms, simplified workflows, lower latency and reduced cost, while adding flexibility and versatility to TAG's software platform.

The Common Media Application Format (CMAF), the result of a collaboration between Microsoft and Apple, is an open, extensible standard that enables efficient streaming over the HLS and MPEG-DASH protocols. CMAF cuts costs, minimises workflow complexity associated with delivering video online, and reduces latency – all crucial issues that content owners or broadcasters face while streaming live or on-demand content.

TAG also added support for Microsoft Smooth Streaming, a legacy hybrid media delivery method that acts like streaming but is based on HTTP progressive download.

Visit <https://www.tagvs.com> and www.magnasys.tv



CLASSIFIED + EVENTS

SMPTE U.S. Show Available to All Online SMPTE

SMPTE WILL HOST its annual technical conference and exhibition on Nov. 10-12 as an interactive and immersive remote experience with a rich array of learning and networking opportunities. Within this highly customisable online format, SMPTE 2020 will provide opportunities for attendees to explore the variety of new technologies and business models shaping the future of media and entertainment. The theme for this year's event is "Game On," with one full day focused on the convergence of esports/gaming and media technology and the unique requirements of the thriving esports industry. Attendees will be welcomed into an immersive environment that incorporates a main conference hub, meeting rooms for a chance to "ask the experts," theatre space for sessions and the annual Awards Gala, and an exhibition hall with private meeting space. SMPTE 2020 will offer flexibility in accessing technical presentations,

practical hands-on training, product and technology demonstrations, peer-group discussions, virtual panels, and sponsored roundtable discussions, as well as networking events, social hours, and even trivia and esports competitions.

Like last year's conference, SMPTE 2020 will include the SMPTE Storytellers series, expanded technical tutorials and training, and programming from SMPTE partners. New content will include bite-sized keynotes, quick "Standards 101" sessions, and shorter hot-topic discussions that allow attendees to build a custom conference experience that suits their own schedules and interests.

While they can join live sessions, meetings, and demos throughout the conference, attendees also will enjoy on-demand access to recorded presentations, exhibitor videos and product guides, and much more. Presenting their

technologies in interactive booths with virtual demo rooms, exhibitors will be able to leverage their own resources — rather than those of a conventional exhibition hall — to optimize the experience for their prospects and customers. Without space constraints of a physical booth, the potential for bigger, higher-quality demos will let exhibitors make more meaningful connections with attendees. Given the ease at which professionals around the world can partake in SMPTE 2020, exhibitors can take advantage of the 24-hour exhibit hall.

Alongside traditional sponsorship opportunities, sponsors will have the option to provide attendees with unique VIP experiences such as behind-the-scenes tours, interactive activities with celebrity hosts, and more. Companies can also design an occasion to bring attendees together for light-hearted fun via remote interaction.

[Visit https://2020.smppte.org/](https://2020.smppte.org/)

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ASIA VIDEO SUMMIT

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Highlights for 2020

- Remember Television?
- Streaming Ahead
- Premium Advertising
- Sporting Times
- Talking Tech

Early Confirmed Speakers



Lee Choong Kay
VP, Chief of Sports
Astro



Lakshanti Fernand
Partner
CMS Singapore



Angeline Poh
Chief Corporate
Development Officer
Mediacorp



Ivy Wong
CEO
VS Media



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